

ANNUAL REPORT 2021-22

EXPERIENTIAL LEARNING

CLASSROOM LEARNING

PROJECT ELECTIVES

















The bygone year has seen many momentous events and the institute performed well on the academic, research, innovation, sports and extra-curricular activities despite some challenging moments on account of the pandemic.

The year saw four major mile stones, one the students returned back to the campus after the pandemic, two the institute was accredited A+ by the National Assessment and Accreditation Council (NAAC), three IIITB was mentioned by the Finance Minister Ms Nirmala Sitharaman in her budget speech to be part of the National Tele Mental Health Program along with NIMHANS and four the institute conducted the first physical convocation after two years on account of the pandemic. This year's annual report highlights all these achievements besides a multitude of accomplishments of Faculty, Staff, Students and alumni.

The theme of this Annual Report is Experiential Learning. Experiential learning is the process of learning through experience, and is more narrowly defined as "learning through reflection on doing". IIITB has over the years developed Experiential learning methodologies and has been practicing the same for the benefit of the students. There is a cover story feature on this theme.

Happy Reading and Congratulations to the team which has compiled this year's annual report in a lucid manner.









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DIRECTOR'S REPORT





The bygone year culminated with the institutes 22nd convocation. This Convocation was special in many ways. It was my first Convocation after I took over as Director exactly a year ago and I feel humbled and blessed to have been bestowed this responsibility. It was the first Convocation of IIITB to have a Woman Achiever (Dr. Pratima Murthy, Director, NIMHANS) as Chief Guest. It was the first Convocation in the newly constructed Auditorium and it was the first Convocation being physically held after two years of pandemic of the century which is still not over.

IIITB is on the verge of entering its 25th year since inception, and we are proud that 294 students graduated in the 22nd convocation. This leads to strong alumni of 3,905 Post Graduates. IIITB's motto " ज्ञानमुत्तमम् ", i.e., Knowledge is Supreme, expresses the ethos of our institute which is knowledge and the pursuit of truth. IIITB besides being a technical university is also a research university, which means that its faculty and students are engaged in pushing the boundaries of knowledge in their wide-ranging fields of endeavor. I am extremely glad to report that the students of the Class of 2022 have come out with flying colours.

I am very pleased to share with you several milestones of our institute community and our stakeholders in the last year. The National Assessment and Accreditation Council (NAAC) graded IIIT Bangalore as A+ in the second cycle of accreditation. IIIT Bangalore is ranked

No.1 in the category of technical private Universities as per India Today-MDRA Best University Survey 2021.

In research, IIITB focuses more on "Translatable Research". Some of the research projects awarded to IIITB's faculty members are:

In collaboration with NIMHANS, the E-Health Research Center (EHRC) of IIIT Bangalore has rendered and will continue to render its technical acumen and support to health initiatives. IIITB is indeed privileged and humbled to be part of the National Tele Mental Health Program with the leadership of NIMHANS and which was announced by the Union Finance Minister Ms. Nirmala Sitharaman in her Budget Speech this year in Parliament. My colleague Prof T K Srikanth will lead this from IIITB side.

IIITB is now contributing to its R&D project at the global level, through the project named Modular Open Source Identity Platform (MOSIP, a software platform like AADHAR). This project's President Prof Rajgopalan of IIITB recently presented MOSIP in ID4AFRICA in Morocco, where 40+ international digital ID product companies declared their products MOSIP compatible. We are also now part of "India Stack" story and was invited to present Digital Identity from India to the world, at the Viva Technology Expo, held in Paris, France. IIITB has truly gone global by rolling out MOSIP in countries like Morocco, Philippines and at the pilot stage in Sri Lanka, Togo, Ethiopia and Guinea.

Dr. Jyotsna Bapat, Dr. Prem Singh, Dr. Priyanka Das, Dr. Vinod Veera Reddy, Dr. Amrita and Dr. Nikhil Krishnan will work on the 5G-Advanced Open-Radio Access Network (ORAN) base station and the institute received ₹ 19.42 Crores from National Mission in Interdisciplinary Cyber Physical System, DST, Government of India. Prof R. Chandrashekhar, received ₹ 9.8 crores from the Centre of eGovernance to start Centre for Technology Research Innovation-Digital Governance (CTRI-DG). Prof Srinath Srinivasa received ₹ 5.41 crores from the Department of Planning, Government of Karnataka to run Centre for Open Data Research for R&D in Data lake and Data Science areas. The International Labour Organization (ILO) awarded Prof Balaji Parthasarathy and Prof Amit Prakash € 50,000 for a research project titled "Case studies on Algorithmic Management in the Logistics and Healthcare Sectors in India". Prof T K Srikanth and Prof Jaya Sreevalsan Nair received a project from TIH, IIT Jodhpur. Prof Meenakshi D'Souza received a project from "Indo-French Centre" for advanced scientific research on Formal Methods for adaptive Control Software. Prof Dinesh Babu Jayagopi was awarded a grant from the prestigious Shastri Indo-Canadian Institute and organized a Symposium titled 'Artificial Intelligence and Rehabilitation Robotics'.

I would like to share with you some of the successes and achievements of our students, during the bygone academic year 2021-22.

Nidhish and Daksh Agarwal, both iMTech students were selected from IIITB to pursue a 6-month research internship in the Domain Name System (DNS), Government of India. Shivangi Garg a student of Master of Science in Digital Society was named 'Mumkin Changemaker Fellow' and she received a fellowship grant to support her research work. Our students participated in several hackathons and won prizes. Nikhil Agarwal an IMTech Student won first

prize in 'Road to Web3' hackathon. He also won a trip to Paris in Al Fashion & Design Hackathon. Divyam Agrawal, Gagan Agarwal and Sri Harsha, all three iMTech students won first place in DeFi Blockchain Hackathon. Aditya Sheth an iMTech student together with Gururaj Majumdar a MTech student, won NetApp Academia Hackathon. Aditya Sheth also won 1st place in Dolat Capital's Hackathon 2022.

Some of our faculty members and a staff member have also received several awards and recognitions last year. Their continued efforts have garnered prestigious recognitions: Prof Madhav Rao and Prof T K Srikanth, were recipients of the IBM Global University Program Academic Award 2021. Prof Srinivas Vivek, was awarded the prestigious Infosys Foundation Career Development Chair Professorship. Prof Uttam Kumar received the coveted Indian National Geospatial Award in December 2021. Prof Jaya S Nair received the Best Associate Editor (AE) award for 2021 from IEEE Transactions on Circuits and Systems for Video Technology (TCSVT). Mr. Subramani, Staff of IIITB made an entry to Indian Book of Records for his Mathematical Wizardry.

Professional Bodies contributions by Faculty Members: Prof V N Muralidhara has been TPC chair of IEEE CONECCT Conference and executive committee of IEEE Bangalore Section. Prof Meenakshi is Secretary cum Treasurer of the executive committee of ACM, India. I Prof Debabrata Das, feel really humbled to be selected as the Chairman of IEEE India Council.

The faculty members have been actively contributing to cutting-edge research, which is often multidisciplinary. Last year, our faculty members and students published 177 peer-reviewed research papers and 20 book chapters. IIITB is also contributing to skill development in niche areas like

Data Science, Software stacks, Security, and Al/ML through online Continuing Professional Education (CPE) Programmes. Around 15,816 of employees of various companies and students have done certificate programs in the above areas. I appreciate Prof V Sridhar, Prof Chandrashekar and Prof V N Muralidhara and the team for spearheading the CPE programs successfully.

The 3,900 + IIITB's Post Graduate degree alumni are making their mark in the fields of technology, finance, international aid, education, entrepreneurship, and many other areas. I am happy to mention that Mr. Khadim Batti, an alumnus of the first Batch of MTech student, his start-up Whatfix received Series D funding of \$ 90 Million from SoftBank. Mr. Paddy Raghavan's Multipl, a fintech firm raised a \$ 3 million funding in pre-series A funding. One of our Board Member who is also the Alumnus of the institute, Mr. Uday Hegde, recently made headlines for an important milestone of his company, USEReady. It received Growth Capital from Boston Based Abry Partners, a well-known private equity investment firm in North America. Nibin Mathew, who is visually challenged was selected for Scholarship Fund Program through its Digital Accessibility Rights Education (DARE) Academy.

On placement per se, IIIT Bangalore has persistently been successful at securing 100% placements despite the effects of the COVID-19 pandemic on the job sector. The placement season of 2021-22 saw impressive 528 offers from 120 companies. The credit goes to the faculty members, students, staff and well-wishers of the Institute. 15 students have received an annual package of more than half a crore and one of our Integrated-MTech students has received an annual package of ₹ 2.02 Crore. IIITB students and alumni not only get good jobs but also admission to top universities of the world for PhD and MBA, like California Institute of Technology, IUPUI-Indiana, Georgia Institute of Technology, Pennsylvania State University, Bar-Ilan University, Arizona State University and Harvard Business School.

In the interest of space, I have only highlighted few of the achievements, however, I want to appreciate and acknowledge all the faculty members, staff and students for their research, teaching, project funding, placements, awards and institute-building contributions.

Finally, let me reiterate that you are highly educated. Your certification is in your degree. However, always be humble with high integrity, take care of your health and work hard to change our Country भारत and the eco-system for the better. As you move on to become alumni of this wonderful institution, I leave you with this famous quote from Swami Vivekananda - उठो, जागो और तब तक मत रुको जब तक लक्ष्य की प्राप्ति ना हो जाये। -- Arise awake and stop not until the goal is reached.





EXPERIENTIAL LEARNING





EXPERIENTIAL LEARNINGAT IIIT BANGALORE

The philosophy of Experiential Learning at IIITB embodies the legendary axiom - "I hear and I forget. I see and I remember. I do and I understand". Universities can serve as catalysts for societal change. Tomorrow's industries come from today's universities, what we create in the university today will become part of the social reality tomorrow. If we invest in creating a mindset toward original thinking, problem-solving and research, we can create a society that can be empowered. Going in this direction, IIIT Bangalore is set on a motto of offering education through 'Experiential Learning' which embraces continued growth and development of students by way of learning through experience, and is more narrowly defined as "learning through reflection on doing. IIITB believes that students learn by example and by direct experience because there are limits to the adequacy of verbal instruction. Thus

paving the way to 'Translatable Research', a process in which research that translates into a product or a policy or a startup.

Experiential learning is an engaged learning process whereby students "learn by doing" and by reflecting on the experience. Experiential learning activities can include but are not limited to, hands-on laboratory experiments, internships, and research. Experiential Learning offers students learning opportunities on and off campus to facilitate continued growth and development. The main components of Experiential Learning are:

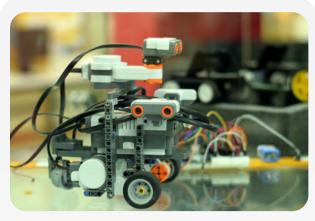
- Classroom based experiential learning
- Project Electives
- Lab-based courses
- Internships
- Research







The classrooms at IIITB are state of the art and have been equipped with teaching aids that will facilitate teachers in purposefully engaging the students in direct experience and focused reflection in order to increase their understanding, develop skills, and clarify values. The teaching aids in the classrooms enable teachers to use their creativity and enhance the learning experience of students. Teachers at IIITB embrace the tenets of Benjamin Franklin's famous maxim - "Tell me and I forget, Teach me and I remember, involve me and I will learn." Though good lecturing in the classrooms are part of IIITB Professors' teaching repertoire, our faculty actively involves the students in their learning process through discussions, group work, hands-on participation, and acquiring information through problem solving in the classroom. Carefully chosen experiences in the classroom are supported by reflection, critical analysis and synthesis. Throughout the classroom sessions, the students are encouraged to actively participate by posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative and constructive dialogues.





Also, our curriculum has separate courses called as Project Electives (PE), in which students are expected to gain hands-on experience. Projectbased learning at IIITB drives students' learning by engaging them in real-world and relevant projects. It's a style of inquiry-based and studentcentric learning. Students typically work in groups over a set period on a project designed to solve a genuine problem or answer a challenging question. Students demonstrate their knowledge and skills by creating a product or presentation for a public audience. Project based learning activities allow students to develop deep content knowledge. Importantly, it also supports in developing skills such as critical thinking, collaboration, creativity and communication.

Students do directly work under the mentorship of faculty, most likely in a Government or an Industry sponsored project. Students also typically engage themselves in small projects through a summer internship which is typically for a duration of 3 months. IIITB students also manage to get similar projects in foreign universities as part of summer internships programs.



Lab-based courses

In the lab-based course System design with Field Programmable Gate Array (FPGA), we have multiple modes of learning. The first aspect is to learn the theory of FPGA-based designs. The next aspect is to write Register Transfer Language (RTL) codes for the design and the third aspect is to learn the tool flow to program the code on the FPGA. The tool flow is taught in a flipped classroom mode, so that the class time is used to clarify doubts, help students debug their designs etc. The tool-flow is given as demos through recorded videos so that students learn at their own pace. The assignment and projects are done in groups so that students can discuss the design amongst themselves.

One-on-one support is given to the groups during class so that the difficulty of the tasks and assignments can be personalized according to the pace at which each group learns. Exams are conducted based on the design implementations followed by questions specific to their designs. In order to grade individual students within the groups, demos and viva are done so that the instructor can understand the depth of the student's understanding. Remote FPGA programming is made available to students who are unable to attend the class in-person or do not have access to a computer with specific tools.

Examples of some Lab Courses at IIITB	Details
ESS 201-Programming-2 Lab	Covers fundamental programming concepts, basic data structures, algorithmic processes, and basic security.
EC 211P Electronics Lab	Covers basic skills to handle components and operate the instruments with confidence. Students will be able to design and debug electronic circuits to solve a problem.
SM 203P Physics Lab (Hides Lab)	Integral theorems, electromagnetics, simple harmonic motion and wave motion part of quantum mechanics, Euler-Lagrange equation and generalized momenta.
EC 306-Digital communication Lab	Basic principles behind the design of wireless systems such as cellular systems (3G/4G) and WiFi, wire-line systems including DSL, cable modems and arinsight into the underlying principles behind the design and analysis of digital communication systems.
CS 303P-Software Engineering Lab	Provides foundational knowledge in Software Engineering and helps to understand critical concepts encountered while dealing with complex software projects.
EG 102P Data Structures and Algorithms Lab	Covers operations on data structures like arrays, linked lists, hashing, stack, queue binary trees, priority queues, balanced binary search trees and graphs and thei application in designing efficient algorithms.
EG 301 Operating Systems Lab	Covers Operating Systems which explain the issues that influence the design of contemporary operating systems.
EC 212P Analog Circuits Lab	Provides students with an in-depth knowledge of discrete transistor devices and circuit design using the transistors.
EC303 Principles of Communication systems Lab	Provides students with an introduction to the basics of analog communication systems, channel types, propagation characteristics at different frequencies and analog modulation techniques.
CS 301P Database Systems Lab	Covers conceptual and physical data models, IM methods and techniques that are appropriate for a given problem.
EC306-Digital Communication Lab	Provides an introduction to the basic principles behind the design of the broadband systems and get an insight into the underlying principles behind the design and analysis of digital communication systems.



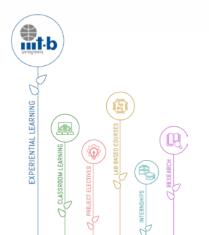




A supervised, structured learning experience in a professional setting that allows students to gain valuable work experience in their chosen field of study. It also gives the student the opportunity for career exploration and development, and to learn new skills. An internship will be on most students' minds — an opportunity to jumpstart their professional careers and supplement their courses with hands-on experience. On-the-job learning reinforces what students learn in the classroom and teaches invaluable skills like time management, communication, working with others, problemsolving, and, most importantly inculcates the willingness to learn.

At IIITB, for both our Masters and Integrated Masters programs, internships are mandatory

and will be for a duration of a semester (6 months). Our curriculum emphasizes on internship which provides real-world exposure to the students. While the courses emphasize concepts and abstract principles, internships involve applying the acquired skills on real world problems. In fact, our students are also highly sought-after, they manage to get offers within a couple of weeks of the placement season. There are two main reasons why our students are very employable. First, our faculty have extensive work experience in the industry, so most courses have real- world assignments and projects. Manya-times companies based on this experience give a full-time job offer to the students subsequently. In some cases, our students have obtained international internships well. This gives them additionally a diverse international exposure, along with work experience.









Research

Most of our research is initiated by the Government of Karnataka through seed funding aimed at solving societal issues, and a substantial portion of our research is also through industry support. Right from the beginning, our institute is following the 80:20 rule in research, 20 percent of it is devoted to abstract research, and the remaining 80 percent of research is delved on applied research that can solve problems in the real world. The main purpose of research at the institute is to go beyond preparing case studies, theses and reports which led to the birth of research centres such as E-Health Research Centre (EHRC), Machine Intelligence & Robotics CoE (MINRO), COMET Foundation and Cognitive Computing CoE (CCC) that are making valuable contributions to the society...

Apart from Research Centres, the research labs provide students the hands-on experience to understand the challenges in their specific research areas of interest.

Surgical and Assistive Robotics Lab (SARL), carry out research and development in the area of Surgical and Assistive Robotics.

- Graphics-Visualization Computing Lab works on topics of visual analytics and spatial computing.
- Web Science Lab (WSL) focuses on building models to extract semantics and understand the impact of the web on different facets of human life.
- The Multimodal Perception lab focuses on humancentered sensing and multimodal signal processing methods to observe, measure, and model human behaviour.

By choosing project electives of their interest, students can work in any of these labs which helps them to earn credits and are motivated to take up research as they eventually do get different perspectives while working on the project. Students working in these labs are guided by Institute faculty as primary supervisors and experts from Industry as secondary supervisors.

Our innovation centre has a mentorship programme, in which students who want to take up entrepreneurship get mentored both by the institute's faculty members and industry experts. Here we bridge research, innovation and entrepreneurship through startups.



3 GOVERNING BODY



GOVERNING BODY MEMBERS





Mr. S Gopalakrishnan Chairman Governing Body, Co-Founder, Infosys



Prof Debabrata Das

Director,

IIIT Bangalore



Mr. B V NaiduChairman,
Sagitaur Ventures Pvt. Ltd.



Mr. I S N Prasad, IAS Additional Chief Secretary, Government of Karnataka



Dr. E.V. Ramana Reddy, IASAdditional Chief Secretary,
Government of Karnataka



Shri Giridhar Aramane, IAS Secretary MoRTH, Government of India



Mr. R Chandrashekhar, IAS
(Retd.)
Former President, NASSCOM



Mr. Gururaj Deshpande Chief Operating Officer, EdgeVerve Systems



Mr. K S Viswanathan
Vice President (Industry Initiatives),
NASSCOM



Mr. Naresh ShahFormer President, India R&D
Hewlett Packard Enterprise



Mr. T K Srirang Senior General Manager, Head Human Resource, ICICI Bank



Mr. Uday Hegde
Co-founder & CEO,
USEReady



Ms. Kishore Ramisetty
Vice President,
Data Platforms Group



Mr. Rishikesha T KrishnanDirector,
Indian Institute Of Management - Bangalore



Cmde SR Sridhar (Retd.)

Registrar IIIT Bangalore,

Secretary to the Board

HIGHLIGHTS OF

GOVERNING BODY MEETING



September 1, 2021 84th Meeting of the Governing Body

- Confirmation of the minutes of the 83rd Governing Body meeting held on July 4, 2021.
- The Registrar gave an update on the actions taken. The Governing Body took note of the actions taken.
- 3. Election/nomination of New Member the Governing Body placed on record the appreciation and sincere thanks for all the services rendered by the following outgoing members on completion of their respective terms: Ms Nivruti Rai, Prof Pankaj Chandra, Prof Annale Saxenian
- 4. The Governing Body approved the membership of Mr Kishore Ramisetty in the category of "Individual Member drawn from Industry". The Chairman welcomed Mr Kishore Ramisetty to the Governing Body.
- M/s Maheswari Associates, Chartered Accountants, Bangalore were appointed as the Internal Auditors for the Financial Year 2020-21.
- M/s Rao Associates, Chartered Accountants were appointed as statutory auditors for the financial year 2020-21.
- Constitution of the subcommittee of Governing Body for the purchase of land available for sale by M/S Cosmic Industrial Laboratories Ltd
- Proposal for extension and addition of more experts to serve on the Faculty Selection and Promotion committee.
- The following points were reported to the Governing Body:

- Prof Debabrata Das took over as Director, IIITB on July 4, 2021 and all statutory authorities/regulating bodies have been informed about the same.
- Campus preparedness for Students' return to campus
- ▶ Admissions for the Academic year 2021-22
- New faculty reporting & Promotions: Dr Nikhil Krishnan and Dr Prem Singh
- Promotions from Associate Professor to Professor: - Prof Meenakshi D' Souza and Prof Manisha Kulkarni.
- Submission of documents for accreditation by NAAC.

November 3, 2021 85th Meeting of the Governing Body

- The Chairman welcomed Mr Giridhar Aramane, IAS and Prof Rishikesha T Krishnan and the Governing Body also approved their membership in the category of Individual member drawn from Government of India and Individual member drawn from educationists/ academia respectively.
- Purchase of land available for sale by Cosmic Industrial Laboratories Ltd - Subcommittee Report /Briefing.
- 3. Extension of contract of Director of MIIT: Registrar brought to the attention of the Governing Body Members that the term of the Director, MIIT, Dr KRV Subramanian is coming to an end on December 31st, 2021. Registrar also informed the members that Dr KRV Subramanian has turned 65 years of age, because of which, the approval of the Governing Body is being sought for extension of the existing contract.

- 4. The Governing Body approved the extension of the term of current contract in respect of Dr KRV Subramanian up to March 31st 2022 as a special case in order to facilitate smooth handing over of MIIT to concerned Myanmar authorities.
- Extending facility of SODEXO cards for faculty and staff for the purpose of food.
- The Director briefed the members about the following points: Annual Faculty Appraisal, Annual Staff Appraisal, Faculty Promotion, NAAC
- 7. The Registrar briefed the members about MIIT's exit plan, project extension and Remote support by way of online Faculty Development Programmes and on-site Academic Administrative Development Programmes as requested by MEA from April 2022 to May 2023.
- 8. MOSIP Briefing: Prof Rajagopalan, the PI for MOSIP project briefed the members on Long Term Support Version (LTS) and technical support and advisory for adopting countries, national roll outs, project vision, mission an roadmap for the next 4 years and FCRA renewal process.
- Chairman directed the Registrar to send a note to Mr. Giridhar Armane, IAS with regard to the renewal of FCRA. Chairman requested Mr. Giridhar Amane to use his good offices to help IIITB in this regard.
- 10. Briefing on NAAC: Registrar apprised the members that IIITB is in the process of renewing the NAAC accreditation. He further stated that the accreditation for the next 5 years is based on the period of assessment from 2015-16 to 2019-20.
- 11. Other points reported to the Board:
- Students return to campus
- Admissions for the current academic year
- Signing of the MoA for Center for Internet of Ethical Things (CIET)
- Prof Madhav Rao, was named as a 2021 recipient of IBM Global University Program Academic Award.
- Prof Srinivas Vivek has been awarded the

- prestigious Infosys Foundation Career Development Chair Professorship.
- Launch of Margadarshi by Hon'ble Minister of Primary & Secondary Education B C Nagesh, Chief Secretary Ravikumar. Prof Dinesh Babu Jayagopi was honoured for his contribution to developing the Margadarshi, UPSC Interview Guidance Platform.

March 9, 2022 86th Meeting of the Governing Body

- Recording of Circular Resolution-Leave Encashment of Prof S Sadagopan
- The Annual Budget for 2022-23 as recommended by the Sub Committee of the Governing Body (Audit and Finance) was presented to the Governing Body members by the Chief Finance Officer (CFO).
- 3. Proposal for increase in Tuition and Mess Fee
- A proposal for Annual Pay Increment for faculty and staff as recommended by the Sub Committee of the Governing Body (Audit and Finance).
- The Summarized observations of Internal Audit for the Half year ended 30th September 2021 was taken note of.

July 3, 2022 87th Meeting of the Governing Body

- 1. Consideration and approval of Award of Degrees
- Award of PHD Degrees
- Award of Master of Science by Research Degrees
- Award of B Tech and M Tech Degrees to Integrated MTech students.
- Award of MTech Degrees.
- Award of MSc (Digital Society) Degrees.
- Award of Scholarships and Medals.
- Analysis of "Class of 2022"



SENATE





EXPERIENTIAL LEARNING



LAB-BASED COURSES CLASSROOM LEARNING 7 PROJECT ELECTIVES /







SENATE MEMBERS



CHAIRMAN: Prof Debabrata Das

MEMBERS, EDUCATIONISTS OF REPUTE

- 1. Prof S S Prabhu
- 2. Dr. Roland Haas
- 3. Mr. S Nagarajan (Senior Industry Technologist)
- 4. Dr Nachiket Mor
- 5. Prof Kriti Ramamritham

TEACHING MEMBERS

6.	Prof R Chandrashekar, Dean (Academics)	21.	Prof Manisha Kulkarni
7.	Prof Jyotsna Bapat, Dean (Faculty)	22.	Prof Meenakshi D'Souza
8.	Prof Srinath Srinivasa, Dean (R&D)	23.	Prof V N Muralidhara
9.	Prof S Rajagopalan	24.	Prof Neelam Sinha
10.	Prof K V Dinesha	25.	Prof Jaya Sreevalsan Nair
11.	Prof Balaji Parthasarathy	26.	Prof Balakrishnan Ashok
12.	Prof G N Srinivasa Prasanna	27.	Prof Subhajit Sen
13.	Prof T K Srikanth	28.	Prof Amit Prakash
14.	Prof G Srinivasaraghavan	29.	Prof Madhav Rao
15.	Prof Shrisha Rao	30.	Prof Dinesh Babu Jayagopi
16.	Prof V Ramasubramanian	31.	Prof Ashish Choudhury
17.	Prof Chetan Parikh	32.	Prof Sujit K Chakrabarti
18.	Prof Subir Kumar Roy	33.	Prof Bidisha Chaudhuri
19.	Prof V Sridhar	34.	Prof Janaki Srinivasan
20.	Prof B Thangaraju	35.	Prof Manish Gupta

NON-TEACHING MEMBERS

- 1. Cmde S R Sridhar (Retd) Registrar and Secretary to the Senate
- 2. Ms. Cynthia D'Mello Staff Officer-Deans' office
- 3. Ms. Ramadevi S Librarian
- 4. Mr M K Durai Murugan Systems Manager

HIGHLIGHTS OF

SENATE MEETINGS



July 20, 2021 81st Senate Meeting

- Prof R Chandrashekar, Dean Academics welcomed Professor Debabrata Das, Director and Chairman Senate to the Senate meeting. Chairman welcomed all the members for the 81 st meeting of the Senate and initiated the meeting.
- The Senate approved the Course proposal titled "DT314 An Introduction to Accessibility in the Global South" submitted by Prof Amit Prakash.
- The Senate noted the completion of Academic Milestone(s) of the PhD students.

October 20, 2021 82nd Senate Meeting

- Prof Chandrashekar briefed the Senate with regard to implementation of the Academic Integrity Policy
- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- The Senate noted that the Thesis examinations and Academic Milestone(s) were conducted online via video conferencing due to COVID-19 and all thesis submissions by graduating students were subjected to requisite plagiarism checks and were found okay.
- The Senate ratified the approval of the two new course proposals titled "CS753 / Software Design Practices" submitted by Prof Sujit Kumar

- Chakrabarti and "VL 820 / Physical design of ASIC's" by Prof Nanditha Rao which were introduced in Term 1 of 2021-22 with approval of the Chairman Senate.
- The Senate noted the update from the Senate Sub-Committee for CPE (PGD and PGC).
- The Senate approved the course proposal titled "Formal Methods in Artificial Intelligence: Conceptual Modelling and Knowledge Representation" submitted by Prof Srinath Srinivasa.

December 3, 2021 83rd Senate Meeting

- Consideration and Recommendation of the Student(s) for Award of PhD Degree
- Consideration and Recommendation of the Students for Award of Master of Technology degree
- The Chairman Senate constituted a Senate Sub-Committee with Prof V Sridhar, Prof Chandrashekar Ramanathan and Prof Uttam Kumar for the PG Diploma in Data Science (PGDDS) and related programmes:
- Prof Chandrashekar Ramanathan briefed the committee ensuing the NAAC visit.

February 9, 2022 84th Senate Meeting

NAAC Accreditation – 2nd cycle (AY 2015-16 to AY 2019-20) The National Assessment and Accreditation Council (NAAC) has graded

- the International Institute of Information Technology Bangalore as A+ in the second cycle of accreditation.
- Consideration and Recommendation of the Student(s) for Award of PhD Degree.
- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- Consideration and approval of Admissions
 Announcements M.Sc. (Digital Society)
- Consideration and approval of the Leave rules for Students and research scholars
- Consideration and approval Industry
 Sponsored M.Tech. Programme for Working
 Professionals at IIIT Bangalore
- New course proposals
- Update from the Senate sub-committee for CPE

April 6, 2022 85th Senate Meeting

- Consideration and Recommendation of the Student(s) for Award of PhD Degree
- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- Launching of Online Degree programmes
- New course proposal for consideration and approval of the Senate
- AQAR report for the year 2020 2021 status
- Increase in intake of Integrated MTech Students
- Update from the Senate sub-committee for IBAB pertaining to the joint IBABIIITB PG Diploma in Big Data Biology (PGDBDB) for the information of the Senate.
- Update from the Senate sub-committee for CPE

June 15, 2022 86th Senate Meeting

- Prof Chandrashekar Ramanathan, Dean Academics, presented to the Senate the graduation summary of the outgoing batch.
- Consideration and recommendation of the Student(s) for award of PhD degree.
- Consideration and Recommendation of the Student(s) for Award of Master of Science by Research Degree
- Consideration and Recommendation of the Students for Award of Master of Technology degree.
- Consideration and Recommendation of the Students for Award of Master of Science (Digital Society) degree.
- Consideration and Recommendation of the Students for Award of Master of Technology and Bachelor of Technology degree to Integrated MTech students
- Consideration and Recommendation of the students for awards / medals
- Special admission to PhD program
- Update from the Senate sub-committee for CPE

July 20, 2022 87th Senate Meeting

- New course proposals and change in course title for consideration and approval of the Senate
- Matters related to Research scholars For consideration and approval of the Senate
- Update from the Senate sub-committee for CPE



5 CONVOCATION





IIIT BANGALORE CONFERRED

294 GRADUATES WITH DEGREES DURING 22ND CONVOCATION

Convocation is the celebration and culmination of the academic efforts and rigour of our students. The Convocation ceremony is a much-revered ritual. The 22nd Convocation of IIIT Bangalore was special in many ways. July 3rd was the first in-campus ceremony that the institute has hosted since July 2019, post COVID-19 pandemic. It was the first Convocation after Prof Debabrata Das took over as the Director of IIIT Bangalore. The newly built Auditorium in Ramanujan Block was all set to confer degrees to the 2022 graduates.



The Academic procession marked the beginning of the IIIT Bangalore Convocation Ceremony. A highlight of this year's convocation was the participation of the Brass Band of the Elite Corps of Military Police (CMP) of the Indian Army whose Regimental Centre is headquartered in Bangalore. The procession led by the Registrar, Commodore SR Sridhar and Dean(Academics) Prof R Chandrashekar comprised the graduating students and it started from the Aryabhata Block way up to the dais of Amanthran.



The ceremony was graced by Chief Guest, Dr. Pratima Murthy, Director, NIMHANS and Guest of Honour, Mr. S.D Shibulal, Co-Founder, Infosys Ltd and Co-Founder, Axilor Ventures The ceremony was presided over by the Chairman of the IIIT Bangalore Governing Body Mr. Kris Gopalakrishnan.



CONGRATULATIONS TO THE GRADUATING CLASS OF 2022





The ceremony that took place on the beautiful green campus of IIIT Bangalore saw 294 students graduate from the institute. The students were from various academic programs – Doctor of Philosophy (10), Master of Science by Research (23), Integrated Master of technology CSE (46), Integrated Master of Technology ECE (19), Master of Technology CSE (157), Master of Technology ECE (20) and Master of science Digital Society (19), 68 students who graduated were female and 226 were male.

The highlights of the ceremony included celebrating students' achievements, with awards and medals. The Institute Gold medals were awarded to the best graduating students- Soham Das, Amogh Johri and Gayatri Raman. Ms Ananya Appan was awarded the Late Sri. N. Rama Rao Medal for Student of the Year.





Addressing the graduating batch Dr. Pratima Murthy said, "I hope you were able to turn the challenges into opportunities. Getting a reward for your effort is fine, it is equally important to take cognizance of what you bring to the society. Regarding the tele mental health initiative, e-Manas that the country has rolled out, will take us much further and the strength of the collaboration between NIMHANS & IIITB will continue."



Speaking on the occasion Mr. SD Shibulal said, "One of the most important concerns for you students today is regarding uncertainty and last 2 years this concern has only increased. Uncertainty and change are here forever. But to take a decision under these circumstances is the most crucial."



Speaking on the occasion, Mr. Kris Gopalakrishnan, Chairman, IIIT Bangalore said, "I am truly happy to be at IIIT Bangalore to share the joy and excitement of the students. All of the hard work of the faculty and the students have paid off! As the students cross this important milestone in their life and embark on their professional journey, I am sure all of them will contribute significantly to bringing economic prosperity to our beloved country. I am proud of all graduating students who are well-equipped with problem-solving skills and backed by multidisciplinary studies within the IT discipline, which is needed by the industry."



While congratulating the students on their graduation, Prof Debabrata Das, Director, IIIT Bangalore, said, "IT has made substantial and revolutionary contributions to medical care, financial business, education etc. With the current challenges of economic growth, pandemic and geo political scenarios, we see numerous career opportunities and progress for our graduates. Our students have received employment offers from leading technology firms like Apple, Amazon, Adobe, Goldman Sachs, Salesforce to name a few. In line with the recommendation of the NEP 2020, now we are planning to roll out multidisciplinary degree programs in partnership with other complementary institutions."



NAAC ASSESSMENT



NATIONAL ASSESSMENT & ACCREDITATION COUNCIL



The National Assessment and Accreditation Council (NAAC) graded IIIT Bangalore as "A+" in the second cycle of accreditation. The grade, "A+" implies "Very Good performance" across the following seven criteria of assessment made by NAAC:

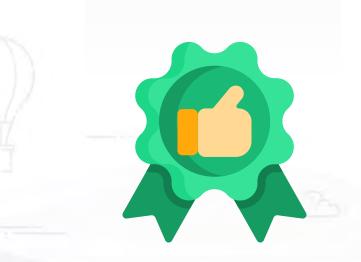
- Curricular Aspects
- Teaching-Learning and Evaluation
- Research, Innovation and Extensions
- Infrastructure and Learning Resources
- Student Support and Progression
- Governance, Leadership and Management
- Institutional Values and Best Practices







IQAC





EXPERIENTIAL LEARNING



C CLASSROOM LEARNING

A PROJECT ELECTIVES

LAB-BASED COURSES





17TH INTERNAL QUALITY ASSURANCE CELL (IQAC) MEETING

CHAIRPERSON

Prof Debabrata Das, Director

COORDINATOR

Prof Chandrashekhar Ramanathan, Dean (Academics)

FACULTY MEMBERS

Prof Madhav Rao, Coordinator (iMTech)

Prof V N Muralidhara, Coordinator (MTech)

Prof Bidisha Chaudhury, Coordinator (MSc Digital Society)

Prof Meenakshi DSouza, Coordinator (MS/Ph.D)

Prof Amit Prakash, Coordinator (Students Affairs)

Prof Srinath Srinivasa, Dean (R&D)

Prof Jyotsna Bapat, Dean (Faculty)

Mr Vivek Yadav, Adjunct Faculty - Alumni

SENIOR STAFF MEMBERS

Cmde S R Sridhar (Retd), Registrar
Mr S Piramanayagam, Chief Finance Officer
Mr Jagadish P Patil, Chief Administrative
officer

INVITED MEMBERS

Dr GR Sinha, Adjunct Professor Ms Cynthia DMello, Staff Officer- Dean's Office

Ms Akshatha, Registrar's Office

Mr Somashekar, Associate Librarian and

Archivist

Ms Vandana Bhavanishankar, HR & Process Administrator

July 19, 2022

KEY HIGHLIGHTS 17TH IQAC MEETING

- Strengthening of the Faculty Outreach activities including Awards, Honours, Editorial assignments, Keynote/Invited talks, Session Chair, Attending Seminars and Workshops
- Feedback about graduating students (Class of 2022)
- Review of value-added courses, workshops, training programs, FDP, etc.
- Continuous Development of Competencies and Capacity building through research centres.
- Best Practices for the current academic year
- Recording of outcomes of Industry advisory board related to quality outcomes of industry-institute interaction

- Plan for Workshops and Guest lectures on IPR, Research Methodology, Entrepreneurship, Quality initiatives, OBE, NAAC, NBA etc.
- Encouraging Students for Research and Higher Studies and keeping track of recognitions/achievements of students
- Development/ procurement of a platform for proper archival systems for obtaining the data and maintaining the records of various NAAC parameters



8 DEAN'S LIST



DEAN'S LIST - JUNE 2022



The Dean's List at IIITB honors the students of MTech and MSc(DT) who have attained a cumulative GPA of 3.75 or above. The list is updated annually.

#	Roll No	Name	Program
1	DT2020009	Gayatri Raman	Master of Science (DT)
2	DT2021017	Vinayak Jha	Master of Science (DT)
3	MT2020010	Neha Kothari	Master of Technology CSE
4	MT2020011	Kalanadhabhatla Sambhavi Apurva	Master of Technology CSE
5	MT2020053	Ankita Paul	Master of Technology CSE
6	MT2020054	Shourabh Payal	Master of Technology CSE
7	MT2020501	Rony Thomas Samuel	Master of Technology ECE
8	MT2020502	Soham Das	Master of Technology ECE
9	MT2020516	Navneet Kour	Master of Technology ECE
10	MT2021017	Ankita Dutta	Master of Technology CSE
11	MT2021026	Ashutosh Kalpesh Soni	Master of Technology CSE
12	MT2021029	Mehta Bhargav Rakeshkumar	Master of Technology CSE
13	MT2021044	Radadiya Divyesh Bharatbhai	Master of Technology CSE
14	MT2021049	Mujumdar Gururaj Pranesh	Master of Technology CSE
15	MT2021054	Himank Jain	Master of Technology CSE
16	MT2021059	Manjaly Jasvin James	Master of Technology CSE
17	MT2021060	Ray Jayprakash Dharmnath	Master of Technology CSE
18	MT2021143	Swaraj Kumar Bhatnagar	Master of Technology CSE
19	MT2021153	Vishal Rai	Master of Technology CSE
20	MT2021527	Rohit Rohit	Master of Technology ECE

The Dean's List at IIITB honors the students of Integrated Mtech (iMTech) who have attained a cumulative GPA of 3.60 or above. The list is updated annually.

#	Roll No	Name	Program
1	IMT2017003	Amogh Johri	Integrated Master of Technology CSE
2	IMT2017004	Ananya Appan	Integrated Master of Technology CSE
3	IMT2017008	Arjun Verma	Integrated Master of Technology CSE
4	IMT2017009	Ayush Yadav	Integrated Master of Technology CSE
5	IMT2017011	Brahma Kulkarni	Integrated Master of Technology CSE

6	IMT2017013	Deep Inder Mohan	Integrated Master of Technology CSE
7	IMT2017016	Eric John	Integrated Master of Technology CSE
8	IMT2017020	Gurleen Kaur	Integrated Master of Technology CSE
9	IMT2017024	Kaushal Mittal	Integrated Master of Technology CSE
10	IMT2017027	Seelam Lalitha	Integrated Master of Technology CSE
11	IMT2017033	Rahul Murali Shankar	Integrated Master of Technology CSE
12	IMT2017034	Kotlo Budde Ravi Kiran Reddy	Integrated Master of Technology CSE
13	IMT2017039	Seethamraju Purvaj	Integrated Master of Technology CSE
14	IMT2017043	Swasti Shreya Mishra	Integrated Master of Technology CSE
15	IMT2017047	Yeddula Sai Dhanush Reddy	Integrated Master of Technology CSE
16	IMT2017511	Kocherla Nithin Raj	Integrated Master of Technology ECE
17	IMT2017513	Mili Goyal	Integrated Master of Technology ECE
18	IMT2017517	U Prateksha	Integrated Master of Technology CSE
19	IMT2017521	S Ram	Integrated Master of Technology CSE
20	IMT2017522	Rathin Bhargava	Integrated Master of Technology CSE
21	IMT2017523	Ronak Doshi	Integrated Master of Technology ECE
22	IMT2017524	Kalyanapu Sailesh	Integrated Master of Technology ECE
23	IMT2017525	S Prasanth	Integrated Master of Technology ECE
24	IMT2018009	Anish Rajan	Integrated Master of Technology CSE
25	IMT2018010	Veluri Aravind	Integrated Master of Technology CSE
26	IMT2018016	Bharath Kumar Joshi	Integrated Master of Technology CSE
27	IMT2018033	Jishnu Vinod Kumar	Integrated Master of Technology CSE
28	IMT2018051	Nikitha A N	Integrated Master of Technology CSE
29	IMT2018052	Nipun Goel	Integrated Master of Technology CSE
30	IMT2018059	Rohit Katlaa R	Integrated Master of Technology CSE
31	IMT2018060	Vaghasiya Sahaj Kuman	Integrated Master of Technology CSE
32	IMT2018067	Sama Sai Karthik	Integrated Master of Technology CSE
33	IMT2018069	Shashank Reddy Chirra	Integrated Master of Technology CSE
34	IMT2018072	Joshi Soham Mahesh	Integrated Master of Technology CSE
35	IMT2018086	Vinayak Agarwal	Integrated Master of Technology CSE
36	IMT2018504	Arpitha Malavalli Srivathsa	Integrated Master of Technology ECE
37	IMT2018509	Karthik Hegde	Integrated Master of Technology ECE
38	IMT2018523	Shubhayu Das	Integrated Master of Technology ECE
39	IMT2018527	Tanmay Joshi	Integrated Master of Technology ECE
40	IMT2019001	Abhinav H Kamath	Integrated Master of Technology CSE
41	IMT2019004	Adrij Sharma	Integrated Master of Technology CSE
42	IMT2019010	Ankit Agrawal	Integrated Master of Technology CSE
43	IMT2019012	Archit Sangal	Integrated Master of Technology CSE
44	IMT2019026	Dakannagari Dhamodhar Reddy	Integrated Master of Technology CSE
45	IMT2019028	Divyam Agrawal	Integrated Master of Technology CSE
46	IMT2019030	G Sri Harsha	Integrated Master of Technology CSE
47	IMT2019033	Ghazi Shazan Ahmad	Integrated Master of Technology CSE

48	IMT2019043	Kautuk Raj	Integrated Master of Technology CSE
49	IMT2019048	Lovejeet Singh Parihar	Integrated Master of Technology CSE
50	IMT2019055	Muppuri Siva Jagadesh	Integrated Master of Technology CSE
51	IMT2019057	Nandakishore S Menon	Integrated Master of Technology CSE
52	IMT2019063	R Prasannavenkatesh	Integrated Master of Technology CSE
53	IMT2019068	Rachapudi Maruthi Sriram	Integrated Master of Technology CSE
54	IMT2019069	Rachna S Kedigehalli	Integrated Master of Technology CSE
55	IMT2019070	Rajath Rao K.N	Integrated Master of Technology CSE
56	IMT2019075	Samaksh Dhingra	Integrated Master of Technology CSE
57	IMT2019091	Venkat Suprabath Bitra	Integrated Master of Technology CSE
58	IMT2019092	Bondugula Vignesh	Integrated Master of Technology CSE
59	IMT2019514	Phani Sriram Vadali	Integrated Master of Technology ECE
60	IMT2019525	Vijay Jaisankar	Integrated Master of Technology CSE
61	IMT2019529	Raghava S N	Integrated Master of Technology ECE
62	IMT2020004	Sooraj Sathish	Integrated Master of Technology CSE
63	IMT2020009	Sathvik I Bhat	Integrated Master of Technology CSE
64	IMT2020014	Netradeepak Manoj Chinchwadkar	Integrated Master of Technology CSE
65	IMT2020018	Rachit Agrawal	Integrated Master of Technology CSE
66	IMT2020024	Pavan Thanay Muthyala	Integrated Master of Technology CSE
67	IMT2020039	Anshul Jindal	Integrated Master of Technology CSE
68	IMT2020053	Chaitanya Manas Cheedella	Integrated Master of Technology CSE
69	IMT2020056	Rudransh Dixit	Integrated Master of Technology CSE
70	IMT2020069	Chinmay Pankaj Parekh	Integrated Master of Technology CSE
71	IMT2020081	Arin Awasthi	Integrated Master of Technology CSE
72	IMT2020094	Riddhi Chatterjee	Integrated Master of Technology CSE
73	IMT2020501	Shreyansh Rajeeva Rai	Integrated Master of Technology CSE
74	IMT2020502	Monjoy Narayan Choudhury	Integrated Master of Technology CSE
75	IMT2020509	Hardik Khandelwal	Integrated Master of Technology CSE
76	IMT2020523	Kedar Yogesh Deshpande	Integrated Master of Technology ECE
77	IMT2020561	Ishaan Sanjay Jalan	Integrated Master of Technology ECE
78	IMT2021009	Madhav Sood	Integrated Master of Technology CSE
79	IMT2021011	Deepkumar Patel	Integrated Master of Technology CSE
80	IMT2021016	Harsh Kumar	Integrated Master of Technology CSE
81	IMT2021019	Siddharth Kothari	Integrated Master of Technology CSE
82	IMT2021022	Subhajeet Lahiri	Integrated Master of Technology CSE
83	IMT2021028	Sankalp Kothari	Integrated Master of Technology CSE
84	IMT2021037	Neil Jeetendra Handa	Integrated Master of Technology CSE
85	IMT2021040	Vikas Kalyanapuram	Integrated Master of Technology CSE
86	IMT2021058	M Srinivasan	Integrated Master of Technology CSE
87	IMT2021101	Sai Madhavan G	Integrated Master of Technology CSE
88	IMT2021103	Shlok Agrawal	Integrated Master of Technology CSE
39	IMT2021524	Barath S Narayan	Integrated Master of Technology ECE
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EVENTS & HAPPENINGS



EVENTS



August 30, 2021

National Sports Day

IIIT Bangalore celebrated National Sports Day as a tribute to Major Dhyanchand, a legendary hockey player of India. To spread awareness on the importance of sports, staying fit and healthy, the Sports Committee of IIIT Bangalore organized few games such as skipping rope and tic-tac-toe competitions for faculty, staff and students as the part of the event.



September 5, 2021

Teacher's Day

The faculty's role to teach, monitor, and provide advice for students on the academic front was very crucial during the pandemic. Recognising the efforts of faculty members, the students of IIIT Bangalore celebrated Teacher's Day in a unique manner. The students created a bunch of memes and stickers to show their gratitude toward their teachers.



September 8, 2022

Vaccination Drive

The second dose of vaccination for COVID was administered at Multipurpose hall. All personnel who were due for their second dose vaccination and wished to avail of the facility took their second dose. The family members of staff and faculty members also availed the facility. Vaccination was sourced through Kauvery Hospital, Electronic City.



September 15, 2021

Foundation Day

Celebrating the Foundation Day is an opportunity for an institute to come together and celebrate the proud history with its faculty, staff and students, IIITB Foundation Day was celebrated on a hybrid manner. In the virtual session, the Chief Guest, Dr. Manish Gupta, Director, Google Research India, Guest of Honour Cdr. K Vijay Kumar shared their valuable words to the audience. Our Director, Prof Debabrata Das addressed the audience and presented mementoes to all the faculty and staff members who had completed milestones based on the number of years they are part of IIIT Bangalore. The recipients of the mementos were Prof Srinath Srinivasa, Prof Shrisha Rao, Prof Neelam Sinha, Prof G Srinivasaraghavan, Prof Preeti Mudliar, Prof Amit Chatopadhyay, Prof Pradeesha Ashok, Ms. Rasmita Sahu and Mr. Vishnu Raj.





September 26, 2021

e-Graduation Ceremony of IIITB-UpGrad (PGD) Programmes

The 6th graduation ceremony of IIITB-UpGrad was held in a virtual mode for 2481 students (1397 with a PG Diploma in Data Science, 850 with a PG Diploma in Al/ML, 234 with a PG Diploma in Software Development with Blockchain or Full Stack development specialization).

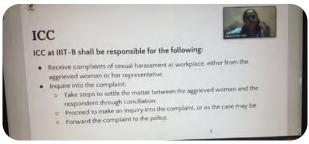
Mr. Siva Padmanabhan, UpGrad Co-founder was the Chief Guest at the virtual graduation ceremony. Mr. Ronnie Screwwala, Mr. Mayank, Co-Founders, Prof Chandrashekar Ramanathan, Dean (Academics), Prof V Sridhar, Faculty In Charge, CPE and Members of Senate from IIIT Bangalore were also virtually present. While congratulating the graduates, Prof Debabrata Das, Director of IIIT Bangalore said that there was a constant increase in the session ratings provided by students on the content. The uptake for online education grew in India, especially among working professionals.

October 5, 2021

Workshop on Gender Sensitisation

In the gender sensitivity workshop organised by Internal Complaints Committee of IIIT Bangalore, participants learned to diversify their perspectives and develop a more well-rounded comprehension of the human experience, which ultimately benefits everyone.





October 29

Session on Prevention of Sexual Harassment

A session to better understand, prevent and report sexual harassment was held for all administrative, project and start-up staff at IIIT Bangalore. The session was conducted by Ms. Kanti Joshi of SASHA India in hybrid mode. It was organised by IIIT Bangalore's Internal Complaints Committee (ICC).



November 3-4, 2021

Diwali

Diwali is all about lighting lamps, colourful rangolis, yummy food, and a lot of fun! The main attraction of the Diwali celebrations at IIIT Bangalore was the delineation of diyas (mud lamps) in the form of Lord Shri Rama. The students meticulously planned this activity. There were diya painting and rangoli competitions for the students on campus. All the students thoroughly enjoyed the DJ night and a special menu on all days added flavours to the Diwali festivities.



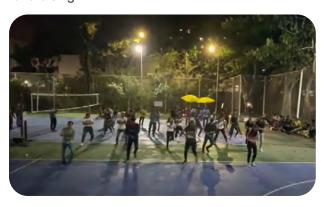




November 1, 2021

Aikyam -Fund Raising Events

Aikyam, the social wing of IIIT Bangalore takes up several social cause tasks throughout the year. This Club had organized a fundraising event to raise awareness and support for the unprivileged section of the society. A plethora of activities were held as a part of this event such as music concerts, silent auctions, half marathons, neighborhood cookouts, and more. Flash Mob by Dance Club, live performance by Music Club and closure volleyball match for IIITB Premier League along with live commentary gone well for fundraising.



November 9, 2021

RMIT conference

Aspart of the 12th edition of the Ramanujan, Math and IT (RMIT) Conference, two eminent speakers gave talks on interesting topics. Prof Debdeep Mukhopadhyay (IIT Kharagpur & Shanti Swarup Bhatnagar Awardee) spoke on "Every Contact Leaves a Trace": Sidechannel and Micro-Architectural Attacks on Modern Cryptosystems". The second speaker, Prof George Andrews (Pennsylvania State University & Fellow of the American Mathematical Society) spoke on "4-Shadows in q-Series, the Kimberling Index, and Garden of Eden Partitions — A Tribute to Hansraj Gupta".

November 15, 2021

Training for Karnataka Government Officials

The IT training and development practices help in enhancing the performance in an organization. IIIT Bangalore held a training session for Government of Karnataka officials. Our Director, Prof Debabrata Das and Dean (Academics), Prof Chandrasekhar Ramanathan spoke on 'Strategies for Application Modernization', 'Efficient Management of Network Infrastructure' and 'Software Architecture Best Practices.'





December 15, 2021

Cultural Performance by Students for the NAAC Peer Team

The National Assessment and Accreditation Council (NAAC) Peer Team visited IIIT Bangalore for performance evaluation between December 12-15. On December 15, IIIT Bangalore held a cultural performance for the NAAC officials. The dance club, Impulse held a dance performance followed by Bharatanatyam performance. The theatre club, Parvaaz presented a mythological play, Gandhari Drishti, which was supported by the Music and Art Clubs.





December 20, 2021

Farewell to Prof Chetan Parikh

Prof Chetan Parikh, who served as a faculty member since 2015 at IIIT Bangalore opted to retire. IIIT Bangalore hosted a farewell party for him. In a heartfelt gathering, his fellow faculty members and students spoke about his good-willed nature and unique teaching abilities. Mrs. Radha Parikh, wife of Prof Chetan was also present at the farewell function.



December 22, 2021

Christmas Celebration

Christmas vibes came early to our campus as it was celebrated on December 23 by faculty, staff and students. The Christmas tree planted in front of Aryabhata Block was decorated. The celebrations included fun games, greetings from Santa (Ms. Padma Joseph, staff member), cake cutting by our Director, Prof Debabrata Das.



January 1, 2022

Ethnic Day and Bonfire

IIIT Bangalore welcomed New year day by organizing 'Ethnic Day'. All faculty and staff members celebrated the day and were dressed in traditional attire. Students had a gala time singing and dancing around the bonfire when the new year began.







January 5-8, 2022

Android Study Jams 2021-2022 by GDSC (Google Developer Student Club)

Google Developer Student Club (GDSC) at IIIT Bangalore conducted Android Study Jams, an event series introducing students to 'Kotlin', the Google framework for developing Android apps. Several sessions were conducted on the Google developer technology. Android Study Jams 2021-2022 was held during December 10, 2021-January 8, 2022.

The first session which was held offline on December 10 introduced the students to 'Kotlin' programme, hosted by Monjoy Choudhury (IMT2020502). The second session, a virtual hands-on tutorial by Ms. Sweta Kumari (Alumna of IIIT Bangalore), was held on December 31, 2021. A virtual hackathon was held during January 5-8, 2022.

January 8, 2022

4th edition of TEDxIIIT Bangalore on 'Unconventionality'

Themed around 'Unconventionality', TEDxIIIT Bangalore held a series of talks by eight inspirational speakers. These distinguished speakers took the road less taken, serving society in unconventional ways. The independently organised TEDx ideasharing event was premiered virtually on January 8 on the TEDxIIITBangalore YouTube channel.

The speakers were Mr. Prateek Sethi (Creative Director at Trip Creative Services), Ms. Diksha Chabbra (Fitness Consultant and health advocate), Mr. Ankush Jain (Clinical Music Therapist), Ms. Chhavi Goel (Leading nutritionist), Mr. Badhri Seshadri (Musician and founder of Motta Maadi Music), Mr. Puneet Bhasin (Advocate and Advisor to the Rajya Sabha Committee on Internet and Technology laws), Ms. Preksha Kaparwan (Al industry stalwart) and Commodore G Prakash (veteran Naval Aviator and anti-submarine warfare specialist).

February 1

IIIT Bangalore mentioned in Union Budget 2022 Speech

It was an honoring moment for IIIT Bangalore when Finance Minister, Mrs. Nirmala Sitharaman mentioned in her Union Budget 2022 speech that NIMHANS to be the nodal center and IIIT Bangalore to provide technological support for the National Tele Mental Health Programme. This programme includes a network of 23 tele mental health centers of excellence with NIMHANS being the nodal center and IIIT Bangalore providing technology support.



February 17-19

RISE Event

IIIT Bangalore hosted its 6th edition of annual flagship event, RISE. The RISE symposium aimed to inspire contributions to society through research-led technological innovations and bring together students, academicians and corporate leaders to collaborate on the 4 dimensions of RISE - Research, Innovation, Society & Entrepreneurship.

The event began with a Research Colloquium on day one, led by PhD and Master of Science scholars presenting their research-led innovations and abstracts to an internal audience. The Technology Fest which was called 'Tech Fest' slated for day two was open to external participants and had an opening keynote by Mr. G. Raj Narayan, Founder & Managing

Director of Radel India. It was followed by three panel discussions around 'Tech for remote education', 'Navigating a career in tech' and 'Data localization and its effect on businesses'. The Technology Fest also hosted debates, other competitions such as Crypto-Combat and CodeQuestand, and honor the winners of the ByteSynergy Hackathon. The winners will have the opportunity to collaborate with IIIT Bangalore's Innovation Centre.

The event was concluded on day three with an 'Open House', for corporate leaders and registered participants to interact with IIIT Bangalore faculty and discuss ongoing research projects as well as the potential collaboration opportunities.





March 4

Happy Healthy Hour

Happy Healthy Hour was a fun, recreational and healthy event organized for faculty and staff of IIIT Bangalore as a part of International Women's Day celebrations. A self-defense session was organised exclusively for women and a fitness session was organised for men too.





March 25-27, 2022

Spandan 2022

After two years of hiatus due to the pandemic, 'Spandan, the annual sports event of IIIT Bangalore finally hit the ground on March 25. It was inaugurated by our Director, Prof Debabrata Das. All participants including students, faculty and staff members took part in 18 different sports including Tennis, Badminton, Basketball, volleyball, football and so on. The three-day event was concluded with a prize distribution ceremony on March 27.





March 31, 2022

Farewell to Mr. Vikas

A farewell was held for Mr. Vikas, Facility Manager of IIIT Bangalore. He served the institute for over five years and supervised facility management, electrical maintenance, gardening and security staff.



April 1-3, 2022

Infin8

Infin8 is IIIT Bangalore's college annual fest the event that students eagerly wait for. Apart from the fun, frolic and platform that it offers to students to exhibit their talents. Infin8 was entirely organised by the student community. The students put in their best efforts to make Infin8 entertaining and exciting. There were back-to-back events, be it dance, music, drama and sports too. The three-day event was packed with simulation games, cultural activities, fun filled games, and much more. With a prize pool of Rs. 80,000, the competitions at the fest saw participation in zest. Taking a break from a hectic schedule, Infin8 provided the participants and guests with one-of-akind experience, rejuvenating and refreshing them. Like every year, infin8 gave students memories worth cherishing.





April 8, 2022

IIITB-CISF Friendly Volleyball Match

A friendly and non-competitive volleyball match brought cordiality between Central Industrial Security Force (CISF) and IIIT Bangalore on April 8. The winning team was CISF and the trophy was presented to the team by our Registrar, SR Sridhar, Commodore (Retd) along with Sports Officer, Dr. Neha Arora. Deputy commandant Ingle Abhishek Narayan graced the occasion as a guest.



April 9, 2022

10 Years of CITAPP

Centre for IT and Public Policy (CITAPP) completes its first decade. Ten years after its founding, it uniquely remains India's only center dedicated to probing the policy questions that emerge from the design, deployment and use of information/digital technologies. CITAPP has also attracted excellent faculty members and enthusiastic students who have strengthened its intellectual purpose. To mark this milestone, CITAPP held an event at Bangalore International Centre. A panel discussion on 'Breaking boundaries in research and practice' by Prof Balaji Parthasarathy from IIIT Bangalore, Mr. Nachiket Mor, from Banyan Academy of Leadership in Mental Health, Ms. Sobia Rafiq from Sensing Local and Ms. Tanuja Ganu from Microsoft Research, India was held. There was also a discussion featuring current students and alumni of IIITB's MSc (Digital Society), MS (by Research) and PhD programmes.



April 22, 2022

Health Talk

Good nutrition is necessary for both physical and mental health, as well as optimum productivity, so important in the workplace. In order to inspire employees to make healthier dietary choices that can enhance energy, health and wellness, a session, 'Health Talk' was conducted at IIIT Bangalore. A renowned registered dietitian nutritionist, Ms. Neha Mansata educated participants on the importance of nutritious food and she answered all queries from the participants.



May 13, 2022

Your DOST Orientation Session

IIIT Bangalore gives utmost importance to the holistic well-being of students. A well-set mind leads to an ample focus on academics as well. In a move to provide counseling services to students, faculty and staff, IIIT Bangalore has tied up with YourDOST, an online platform to offer free counselling services 24/7. On May 13, an orientation session was held for first year iMTech students.

May 21, 2022

COMETFoundationWorkshopon'Intelligent Reflecting Surfaces: Fundamentals and Applications'

As a part of IIITB COMET Foundation Workshop Series on Advanced Communication Systems, one-day virtual workshop on "Intelligent Reflecting Surfaces: Fundamentals and Applications" was held on May 21, 2022. Intelligent Reflecting Surfaces (IRS) are gaining traction worldwide as a means to create Smart Radio Environments (SREs) by introducing controllable reflectors that can improve the performance and 5G & Beyond networks. This workshop was organized to introduce participants to the basics of IRS and its application areas, including details on mathematical modelling. Prof Rajarshi Mahapatra (IIIT Naya Raipur) and Prof Priyanka Das (IIIT Bangalore) were the speakers in this workshop.

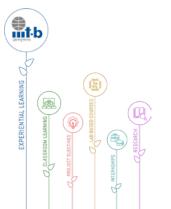
June 21, 2022

International Yoga Day

Yoga is nothing but a holistic approach to health and well-being. Every year, IIIT Bangalore considers Yoga Day as a great opportunity to promote yoga in campus and encourage students, faculty and staff to adopt healthy lifestyle practices. A Government-certified Yoga Trainer, Mr. Kaushik S V, Head-Institutional Programs, The Art of Living Foundation, lead a session in Sports Arena, Badminton Court (Ramanujan Building). The session was inaugurated by our Director, Prof Debabrata Das, Registrar, Commodore SR Sridhar (Retd.), Chief Administration Officer, Mr. Jagadish Patil, Chief Finance Officer, Mr. S. Piramanayagam and Sports Officer, Dr. Neha Arora.







July 26, 2022

IIIT Bangalore bid Farewell to Prof K V Dinesha

He was not only a go-to person for his colleagues and students for the last twenty years in IIIT Bangalore, but he was also a guide and a mentor in academic development. He is none other than Prof K V Dinesha, who was known for his calm demeanor. On July 29, IIIT Bangalore held a small gathering to bid a fond farewell to him in R103, where his students and colleagues, including our Director, Prof Debabrata Das gathered to express gratitude and wish him the best for his

retirement life. He was accompanied by his by his wife, Prof Anuradha. Prof Das, Prof Chandrashekar Ramanathan, Dean (Academics), Prof Jyotsna Bapat, Dean (Faculty), and Commodore SR Sridhar, Registrar, shared their parting words and fondly recalled their working experience with him. They thanked him for all his efforts and hard work and expressed gratitude to him for all his uncommon contributions to realizing the academics and development of the institute. Ms. Kalpana Subramappa, Programme Manager, MINRO, who was his student recalled his guidance that helped her to excel in her studies then.





GUEST TALKS

SAMVAAD WEEKLY TALK SERIES



2021

July 16: "Eco-friendly and Sustainable Technologies - Case Studies of Projects Implemented by NIE-CREST" by Prof Sham Sundar Subbarao, NIE-CREST and Department of Mechanical Engineering, NIE, Mysore

July 19: "Practical Threshold Cryptography from Native Assumptions" by Yashvanth Kondi, Northeastern University July 26: "Private Set Intersection" by Ms. Gayathri Garimella, Oregon State University

August 2: "Time-memory trade-offs for sidechannel resistant cryptographic implementations" by Annapurna Valiveti and Prof Srinivas Vivek, IIIT Bangalore

August 9: "Trends and Challenges in Automotive Cyber Security" by Prof Roland Haas, IIIT Bangalore

August 16: "Streaming codes for low-latency communication" by Prof Nikhil Krishnan, IIIT Bangalore

August 23: "PHY layer processing for 5G-NR base station design" by Prof Prem Singh, IIIT Bangalore

August 30: "Intelligent Massive MIMO for beyond 5G Systems" by Abhay Kumar Sah, IIT Roorkee

September 6: "Online Education -- the Missed Opportunity" by Prof S. Sadagopan, IIIT Bangalore

September 13: "Analysis of radio spectrum pricing for commercial mobile services: A cross country study" by Prof V. Sridhar, IIIT Bangalore

September 20: "Assessments - The Achilles heel of online education" by Prof Chandrashekar Ramanathan, IIIT Bangalore

October 4: "Whither Technical Education? (During the Fourth Industrial Revolution)" by Prof S. S. Prabhu, IIIT Bangalore

October 11: "Access to Education amidst COVIDinduced Lockdowns and Restrictions" by Prof Amit Prakash, IIIT Bangalore

October 18: "Questions: A window into children's minds" by Prof Jayashree Ramadas, (retired from) TIFR Hyderabad

October 25: "Al-based Narrative Arc Generation for an Engaging Learning Experience" by Chaitali Diwan and Prakhar Misra, IIIT Bangalore

November 8: "Automated Evaluation of Programming Assignments" by Prof Sujit Kumar Chakrabarti and Ms. Nikhila K N, IIIT Bangalore

November 15: "Multi-level Integrative Study of Multiomics Cancer Data" by Ms. Reddy Rani Vangimalla, ZS Associate (IIITB Alumna)

November 22: "Towards Machine Learning Assisted Precision Epigenomics - Challenges and **Opportunities"** by Tanmayee Narendra, University of Tübingen (IIITB Alumna)

November 29: "Minimum complexity drives regulatory logic in Boolean models of living systems" by Areejit Samal, IMSc Chennai

December 6: "Targetting the epigenome for cancer therapy" by Prof Vijayalakshmi Mahadevan, IBAB

December 13: "Using multi-omic data to engineer cancer microenvironment" by Nameeta Shah, MSCTR

December 20: "miRNA Function: What do we gain by sequencing?" by Prof Vivek Tanavde, Ahmedabad University

2022

February 21: "Medical Image Segmentation with Self-Supervision Learning" by Prof Viswanath G, IIIT Bangalore

February 28: "Al in Blood Cancer Imaging" by Anubha Gupta, IIIT Delhi

March 7: "Computation and plasticity in the brain: Towards remedying the oversimplifications" by Rishikesh Narayanan, IISc Bangalore

March 14: "Compressed Sensing MRI: k-space Sampling to Reconstruction" by Raji Mathew, IISc Bangalore

March 21: "Quantifying human brain white matter microstructural organization using track weighted imaging" by Prof Rajikha Raja, University of Arkansas for Medical Sciences (IIITB Alumna)

March 28: "Medical Image and Signal Analysis" by The Research Group of Prof Neelam Sinha, IIIT Bangalore April 4: "Spatiotemporal Data Analysis and Visualization: A Topological Feature Directed Approach" by Vijay Natarajan, IISc Bangalore

June 13: "Latest advances in mmWave MIMO and Massive MIMO Technology" by Prof Aditya K. Jagannatham, IIT Kanpur

April 11: "Computing Topological Distances between Multivariate Data" by Prof Amit Chattopadhyay, IIIT Bangalore

June 20: "Artificial Intelligence for Wireless Communications" by Anand Mukhopadhyay and Praful Pai, Mathworks.

April 18: "Studies of 3D MHD Turbulent Flows at Various Magnetic Prandtl Numbers" by Prof Shiva Kumar Malapaka, IIIT Bangalore

June 27: "Beam Management in 5G: A Stochastic Geometry Analysis" by Dr. Sanket Kalamkar, Qualcomm, San Diego

May 3: "System response to perturbations in maps and flows, or A physicist's guided tour of Ants(!) and of Sensory systems" by Prof B. Ashok, IIIT Bangalore July 4: "ORAN standard and its implementation aspects" by Dr. Sai Dhiraj Amuru, Principal Engineer, WiSig Networks

May 9: "Forecasting the Future: A Hybridization of Classical + ML Approach" by Prof Uttam Kumar and Tanujit, IIIT Bangalore

July 11: "An Overview of Key Technologies in Physical Layer Security" by Prof Priyanka Das, IIIT Bangalore

May 16: "Multiscale Computational Thinking in Data Science" by Prof Jaya Sreevalsan Nair, IIIT Bangalore

July 18: "Embedded System in Robotics: Control Challenges" by Prof Leena Vachhani, IIT Bombay

June 6: "Mobile Edge Computing and It's Standardization Aspects" by Prof Arzad Alam Kherani, IIT Bhilai

July 25: "Dynamics, Control and Challenges in Underwater Robotics" by Prof R Thiyagarajan, IIT Tirupati

FACULTY AWARDS





Prof Madhav Rao and Prof T K Srikanth were recipients of IBM Global University Program Academic Award 2021. The award is to explore research in identifying levels in Autism spectrum disorder and Conversational Al for mental health.



Prof Srinivas Vivek, IIIT Bangalore was awarded the prestigious Infosys Foundation Career Development Chair Professorship.

The duration of this chair professorship is for a period of 3 years, until July 2024. The Career Development Professorship is meant to help Assistant Professors advance professionally.



Prof Uttam Kumar selected for the Indian National Geospatial Award 2021 on December 15. The award is conferred in recognition

of the outstanding contribution towards the development of Geospatial Science, Technology and Applications by Indian Society of Remote Sensing (ISRS). It carries medal, citation and award money. The award was given at the Annual Convention & National Symposium on theme 'i-Geomatics: An Integrated Technology to Empower Citizens Towards Self Reliant Nation'.



Prof Jaya Sreevalsan Nair receieved the Best Associate Editor (AE) award from IEEE Transactions on Circuits and Systems for Video Technology (TCSVT).

The TCSVT Editor-in-Chief is instrumental in the decision and the Editorial Board confers the award to associate editors whose timely work and professionalism have made a significant impact on the reputation of the TCSVT.



Dr. Dibakar Das, Post Doctoral Fellow, Prof Shiva Kumar Malapaka, Faculty & Warden (Men's Hostel), Prof Jyotsna Bapat, Dean-Faculty and Prof Debabrata Das, Director received the Best Paper Award (academia) for the paper titled 'A Proactive Connection setup Mechanism for Large Quantum Networks' in IEEE CONECCT 2022 held on July 10, 2022 virtually. The paper was chosen as the best paper out of 578 papers submitted.

FACULTY & STAFF ACHIEVEMENTS





Prof Meenakshi D'Souza successfully taught and completed a 12-week long course on Software Testing for NPTEL, Swayam, Government of India online MOOC,

from July to October 2021.



Prof Jaya Sreevalsan Nair served as an external examiner, for Ph.D. thesis examination of Ms. Dimple A. Shajahan, Department of Engineering Design, IIT Madras during August 2021; she was also the thesis viva voce examiner in October 2021.



Prof Srinivas Vivek was nominated as a mentor for a research project on homomorphic encryption funded under the CySecK Research Development Programme of

Government of Karnataka for a period of six months that started from December 2021.





Professors, Balaji Parthasarathy and Amit Prakash were awarded a grant of € 50,000 by the International Labour Organization, for their research project titled, "Case studies on Algorithmic Management in the Logistics and Healthcare Sectors in India". The duration of this project is one

year, from January 10, 2021 till December 20, 2022.



Our Director, Prof Debabrata Das was felicitated by IEEE Bangalore Section for his selection as Chairman of IEEE India Council. He becomes the 2nd person from Karnataka to get this distinguished post in the last 44 years' history of IEEE Karnataka.



Prof Dinesh Babu J was awarded a grant from prestigious Shastri Indo-Canadian Institute for organizing a 'Conference/Symposium' titled 'Second Indo-Canadian

Conference on Artificial Intelligence and Rehabilitation Robotics'. The conference was held on March 21 & 22, in an online mode. Dr. Shehroz Khan and Prof Alex Mihailidis from University of Toronto were the coorganizers.



Prof Muralidhara V N received IEEE Championship Award for his contributions to IEEE Conference organization.





Prof Meenakshi D'Souza and Prof Jaya Sreevalsan Nair were selected for grade elevation to ACM Senior Members 2022.The Senior Members Grade recognizes those ACM members with at least 10 years of professional experience and at least 5 years of Professional Membership in the last 10 years,

who have demonstrated performance through technical leadership, and technical or professional contributions.



India Book of Records has recognized Mr. Subramani K, Project Associate of IIIT Bangalore for his achievement in creating the largest magic square made in MS-

Excel (IBR-21459). The record for making the largest magic square in MS-Excel was set by him. He made the largest magic square with 10000 rows and 10000 columns. He used the numbers from 1 to 10000 and the sum of all numbers of each row and column is 50005000.

ALUMNI ACHIEVEMENTS



Dr. Sunil Kumar Vuppala, an Alumnus of IIIT Bangalore received IETE-Biman Behari Sen Memorial Award for 2021. This national level award is bestowed to a person for outstanding contribution in the emerging areas of Electronics and Telecommunications with emphasis on R & D and industrial development. IETE recognized Sunil Kumar Vuppala's contributions to Trusted Al, Autonomous image acquisition using Al, Optimization of energy management, and IoT. He received the award virtually on September 25.



Fasal, a Bangalore based Agritech Intelligence Startup, founded in 2018 by Mr. Ananda Verma, an alumnus of IIIT Bangalore raised USD 4 million from investors. The fund was raised to spread their business across India and South East Asia, strengthen full-stack services and to hire staff for sales and marketing, agronomy, and technology teams.

Mr. Nibin Mathew, an alumnus of MSc (Digital Society) of 2019-21 batch, was selected for Cycle 2 of "G3ict's Scholarship Fund Program" through its Digital Accessibility Rights Education (DARE) Academy.Nibin was one among the twenty applicants who received the award for Cycle 2 of the scholarship following a global call for applications held during October 21 to November 21, 2021.

Ms. Trisha Mittal (alumna of IIITB), a fourth-year Ph.D. candidate at the University of Maryland, College Park, USA was named as an Adobe Research Fellow for the year 2022. The Adobe Research Fellow program recognizes outstanding graduate students conducting exceptional research in areas of computer science that are important to Adobe.

Number Theory, an Al/ML data science platform company, co-founded by Mr. Tarun Gulyani, an alumnus of IIIT Bangalore was acquired by Newgen Software Technologies, a unified digital transformation platform company. According to Mr. Tarun, the synergy helped in hiring more quality talent and reaching out to a customer base at a global level.

USEReady Received Growth Capital from Boston Based Abry Partners, a well-known private equity investment firms in North America. With this capital round, USEReady was able to accelerate the plans of Practice Growth, Geography Expansion, and Global delivery. Mr. Uday Hegde, Co-Founder of USEReady and an Alum of IIIT Bangalore planned to reach 1000 employees in India during 2023 and globally 1500 and add at least 3 more locations outside India.

FIntech firm Multipl raised \$3 million in a funding round led by Blume Ventures, GrowX Ventures, IIFL, and Kotak Securities Limited. The company was founded Mr. Paddy Raghavan, Alum of IIITB. The funds will be utilized to widen investment options and help Indians plan their expenses better.



10 FINANCIALS





31-March-2022

31-March-2021

INCOME

Other Receipts | MIIT Mentoring Income

Tuition Fees | Hostel and Facility Fees | Academic Activities | Interest on Bank Deposits

2,25,87,32,602

2, 19, 92, 87, 705

EXPENDITURE

(before depreciation)

MIIT Project Expense

Faculty & Staff Expenses | Student Expenses | Academic Expenses Infrastructure Expenses | Administrative & General Expenses

1,73,90,21,985

1,67,90,22,700

SOURCE OF FUNDS

2,53,63,73,496

Capital Grants | Corpus Account | General Fund Research Grants | Grants for Scholarship | Grants for Travel Chair Professorship | Endowment funds Designated/Earmarked Funds

1,76,27,69,564

APPLICATION OF FUNDS

Fixed Assets | Net Current Assets

2,53,63,73,496

1,76,27,69,564

in INR

International Institute of Information Technology - Bangalore 26/C, Electronics City, Hosur Road, Bangalore - 560 100

Balance Sheet as at 31st March 2022

			(Rs.)
SOURCE OF FUNDS	Sch.No.	31-Mar-22	31-Mar-21
<u>Unrestricted Funds:</u>			
Capital Grants	A	28,37,00,000	28,37,00,000
Corpus Account	В	1,03,18,56,846	71,16,30,160
General Fund	С	66,12,12,958	48,06,46,455
Restricted Funds:			
Research Grants	DA	49,18,09,476	21,41,86,571
Grants for Scholarship	DB	2,57,45,301	2,70,75,792
Grants for Training	DC	42,500	-
Chair Professorship	EA	2,69,79,286	2,99,12,766
Endowment funds	EB	27,95,352	28,21,236
Designated/Earmarked Funds	EC	1,22,31,777	1,27,96,584
Total		2,53,63,73,496	1,76,27,69,564
APPLICATION OF FUNDS	Sch.no.	31-Mar-22	31-Mar-21
Property, Plant and Equipment:			
Net Block	F	52,02,71,272	38,32,53,583
Current Assets, Loans & Advances:			
Advances & Receivables	G	8,62,00,812	9,11,48,886
Deposits	н	10,41,390	5,29,890
Prepaid Expenses	I	75,74,844	69,99,075
Cash & Bank Balances	J	2,08,16,66,178	1,43,08,29,977
MIIT Project Current Assets	W1	1,98,87,213	5,03,16,626
		2,19,63,70,437	1,57,98,24,454
Less : <u>Current Liabilities & Provisions:</u>			
Current Liabilities	K	10,11,56,474	13,73,26,509
Provisions	L	7,05,04,014	2,59,29,361
MIIT Project Current Liabilities	W2	86,07,725	3,70,52,603
		18,02,68,213	20,03,08,473
Net Current Assets		2,01,61,02,224	1,37,95,15,981
Total		2,53,63,73,496	1,76,27,69,564
Significant Accounting Policies & Notes forming part of Accounts	x	,,,,,,	, -,,,
Part of Accounts			

For International Institute of Information Technology Bangalore

SD/-

Prof. Debabrata Das Director

Place: Bangalore Date: 13.09.2022



As per our report of even date For Rao Associates Chartered Accountants Firm Reg. No. 003080S SD/-

Sandeep S Shekar Partner Membership No. 232631

International Institute of Information Technology - Bangalore 26/C, Electronics City, Hosur Road, Bangalore - 560 100

Income and Expenditure Account for the year ended 31st March 2022

Income	Sch.No.	31-Mar-22	31-Mar-21
Tuition Fees	M	2,02,41,04,341	2,04,48,38,146
Hostel and Facility Fees	N N	4,35,66,583	3,39,51,350
Academic Activities	o	5,88,69,651	5,05,56,851
Interest on Bank Deposits	P	6,84,99,097	5,14,30,664
Other Receipts	Q	2,40,02,109	1,33,67,564
MIIT Mentoring Income	wз	3,96,90,821	51,43,130
TOTAL (a)		2,25,87,32,602	2,19,92,87,705
	7 2 1 37	21.15 22	21.17 01
Expenditure	Sch.No.	31-Mar-22	31-Mar-21
Faculty & Staff Expenses	R	25,74,18,906	23,89,54,532
Student Expenses	s	1,01,13,651	61,31,383
Academic Expenses	т	1,34,39,31,380	1,36,32,88,233
Infrastructure Expenses	U	6,36,65,481	4,33,26,330
Administrative & General Expenses	v	3,54,99,321	1,92,57,010
MIIT Project Expense	W4	2,83,93,246	80,65,211
TOTAL (b)		1,73,90,21,985	1,67,90,22,700
Excess of Income before Interest, Depreciation and Appropriation (a-b)		51,97,10,617	52,02,65,005
Depreciation on Assets	F	(3,91,44,114)	(1,85,36,913
Excess of Income before Appropriation		48,05,66,503	50,17,28,092
Appropriation: Transferred to Corpus Fund		30,00,00,000	25,00,00,000
Surplus/ (Deficit) for the year transferred to General Fund		18,05,66,503	25,17,28,092
Significant Accounting Policies & Notes	x		
forming part of Accounts			

As per our report of even date

For International Institute of Information Technology Bangalore For Rao Associates Chartered Accountants Firm Reg. No. 003080S

SD/-

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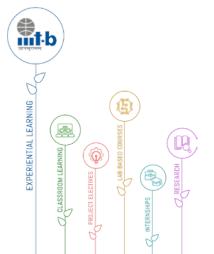
Prof. Debabrata Das Director

Place: Bangalore Date: 13.09.2022



SD/-

Sandeep S Shekar Partner Membership No. 232631





11 INFRASTRUCTURE







September 27, 2021 Lifts Inauguration at Ramanujan Block

Giving a major boost to the campus facilities, IIIT Bangalore installed three lifts in Ramanjuan Block. Prof Debabrata Das (Director) inaugurated three lifts on September 27. All the three lifts connect users from the basement to the auditorium in third floor. Out of three lifts, two lifts have the capacity to carry 16 people each and the other has a capacity of 24 people. Cmde S R Sridhar (Retd) (Registrar), Prof Chandrashekhar Ramanathan (Dean-Academics) and Mr. J P Patil (Chief Administration Officer), staff and the students were also present during the inauguration.

October 29, 2021 Inauguration of Sports Arena

A new indoor sports court, "Sports Arena" was inaugurated on October 29 by our Director, Prof Debabrata Das in the presence of key officials from the Administration department, faculty members, staff and students. This sports facility is a huge area that accommodates a badminton court, yoga room and a play area for table tennis.







Rainwater Harvesting Initiative

Being a Green Campus, water conservation is taken seriously at IIIT Bangalore. Water conservation was implemented on different levels in the campus from rainwater harvesting, and tree plantation to maintaining the underground water levels to recycling the water for gardening purposes. The campus has a rooftop rainwater harvesting (RWH) facility. The college buildings, hostels and the nearby areas were catchment areas for RWH. The college set-up the rain harvesting unit at different niches within the college campus, guest house and hostels, which had the total storage capacity of up to 3.6 lakh litres. The conserved rainwater served as a secondary source of water. From the newly installed RWH, about 755KL of rainwater was harvested and utilized which was 70 tanker loads in 50 days that amounts to ₹ 1.02 lakhs of saving.



T PEOPLE





EXPERIENTIAL LEARNING



A PROJECT ELECTIVES (A)





INTERNSHIPS

FACULTY MEMBERS



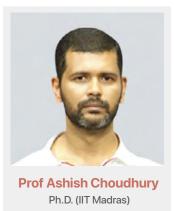


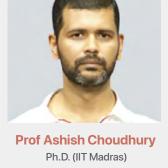






Prof. Arti Dilip Yardi Ph.D. (IIT Bombay)

















Prof Chandrashekar Ramanathan Ph.D. (Mississippi State University)



Prof Chetan Parikh Ph.D. (University of Florida)



Prof Debabrata Das Ph.D. (IIT Kharagpur)



Prof Dinesh Babu Jayagopi Ph.D. (École Polytechnique Fédérale de Lausanne)



Prof G N Srinivasa Prasanna Ph.D. (Massachusetts Institute of Technology)



Prof G Srinivasaraghavan Ph.D. (IIT Kanpur)



Prof Janaki Srinivasan Ph.D. (University of California Berkeley)



Prof Jaya Sreevalsan Nair Ph.D. (University of California Davis)



Prof Jyotsna Bapat Ph.D. (Pennsylvania State University)



Ph.D. (IIT Bombay)



Ph.D. (University of Alabama)





Prof Meenakshi D'Souza Ph.D (IMSc Chennai)



Ph.D. (IIT Bombay)



Prof Manisha Kulkarni Ph.D. (IMSc Chennai)



Prof Neelam Sinha Ph.D. (IISc Bangalore)



Prof Nikhil Krishnan M Ph.D. (IISc Bangalore)



Prof Pradeesha Ashok Ph.D. (IISc Bangalore)



Ph.D. (University of Texas at Austin)



Prof Prem Singh Ph.D. (IIT Kanpur)



Prof Priyanka Das Ph.D. (IISc Bangalore)



Prof Sachit Rao Ph.D. (Ohio State University)





Ph.D. (University of Iowa)



Prof Srinath Srinivasa Ph.D. (Brandenburg Technical **University Cottbus)**



Prof Srinivas Vivek Ph.D. (University of Luxembourg)



Prof Subajit Sen Ph.D. (University of Waterloo)



Prof Subir Kumar Roy Ph.D. (IIT Bombay)



Prof Sujit Kumar Chakrabarti Ph.D. (IISc Bangalore)



Prof T K Srikanth Ph.D. (Cornell University)



Prof Thangaraju B Ph.D. (Bharathidasan University)



Prof Uttam Kumar Ph.D. (IISc Bangalore)



Prof V Ramasubramanian Ph.D. (TIFR Bombay)



Prof V N Muralidhara Ph.D. (IIT Delhi)



Prof Roland Erik Haas Ph.D. (Technical University of Clausthal)



Ph.D. (University of Iowa)



Prof Vinod Veera Reddy Ph.D. (Nanyang Technological **University Singapore)**



Prof Vinu E Venugopal Ph.D. (IIT Madras)



DOMAIN-WISE FACULTY MEMBERS

Computer Science Faculty

- Prof Ashish Choudhury
- Prof Badrinath Ramamurthy
- Prof G. N. S. Prasanna
- Prof Meenakshi D'Souza
- Prof Pradeesha Ashok
- Prof Sachit Rao
- Prof Shrisha Rao
- Prof Srinivas Vivek
- Prof V. N. Muralidhara

Information Technology & Society Faculty

- Prof Amit Prakash
- Prof Balaji Parthasarathy
- Prof Bidisha Chaudhari
- Prof Janaki Srinivasan
- Prof Preeti Mudliar
- Prof S. Rajagopalan
- Prof V. Sridhar

Mathematics & Basic Sciences Faculty

Mathematics:

Prof Manisha Kulkarni

Physics:

- Prof Balakrishnan Ashok
- Prof Shiva Kumar Malapaka

VLSI Systems Faculty

- Prof Chetan Parikh
- Prof Madhav Rao
- Prof Nanditha Rao
- Prof Sachit Rao
- Prof Subajit Sen
- Prof Subir Kumar Roy

Data Sciences Faculty

- Prof Amit Chattopadhyay
- Prof Chandrashekar Ramanathan
- Prof Dinesh Babu Jayagopi
- Prof G. Srinivasaraghavan
- Prof Jaya Sreevalsan Nair
- Prof Manish Gupta
- Prof Neelam Sinha
- Prof Sachit Rao
- Prof Srinath Srinivasa
- Prof T. K. Srikanth
- Prof Uttam Kumar
- Prof V. Ramasubramanian
- Prof Vinu E Venugopal
- Prof Viswanath Gopalakrishnan

Networking, Communication & Signal Processing Faculty

- Prof Amrita Mishra
- Prof Arti Yardi
- Prof Debabrata Das
- Prof Jyotsna Bapat
- Prof Neelam Sinha
- Prof Nikhil Krishnan M
- Prof Prem Singh
- Prof Priyanka Das
- Prof Sachit Rao
- Prof V. Ramasubramanian
- Prof Vinod Reddy

Software Engineering Faculty

- Prof B. Thangaraju
- Prof Chandrashekhar Ramanathan
- Prof Meenakshi D'Souza
- Prof Sujit Kumar Chakrabarti

KEY OFFICIALS





Prof Debabrata Das Director, IIITB



Prof Chandrashekar Ramanathan Professor & Dean (Academics)



Prof Jyotsna Bapat Professor & Dean (Faculty)



Prof Srinath Srinivasa Professor & Dean (R&D)



Cmde SR Sridhar (Retd) Registrar, IIITB - Secretary to the **Board and Outreach Head**



Chief Administration Officer



S Piramanayagam Chief Finance Officer



Faculty Advisor



Prof Madhav Rao Associate Professor, iM.Tech Coordinator and Faculty incharge-Labs



Prof V N Muralidhara Associate Professor, M.Tech Programme Coordinator



Prof Meenakshi D'Souza Professor & M.S. Ph.D. Programme Coordinator



Prof Bidisha Chaudhuri Associate Professor & MSc (DT) Programme Coordinator



Prof Jaya Sreevalsan Nair Associate Professor & Warden (Women's Hostel)



Prof Nanditha Rao Assistant Professor & Warden (Women's Hostel)



Prof Shiva Kumar Malapaka Assistant Professor & Warden (Men's Hostel)



Prof Uttam Kumar Assistant Professor & Warden (Men's Hostel)



Prof Amit Prakash
Associate Professor &
Coordinator (Students Affairs)



Gopalakrishnan
Assistant Professor &
Coordinator (Students Affairs)



Prof Sachit RaoAssociate Professor & Faculty-in-charge Student Exchange



Prof T K Srikanth
Professor & Faculty-in-charge
Computing



Prof V Sridhar
Professor & Faculty In-Charge,
Continuing Professional
Education, Institutional Finance



Prof Balakrishnan Ashok Associate Professor & Facultyin-charge Library



Prof Dinesh Babu Jayagopi Associate Professor & Facultyin-charge Internships & Placements



Prof Vinod Veera Reddy
Assistant Professor and
Controller of Examinations

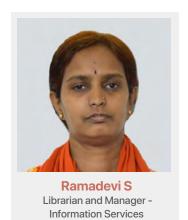


Cynthia DMelloStaff Officer- Deans office



M K Durai Murugan IT and Data Centre Manager







RESEARCH ADVISORY COMMITTEE (RAC) MEMBERS



Dr. P Satish Chandra

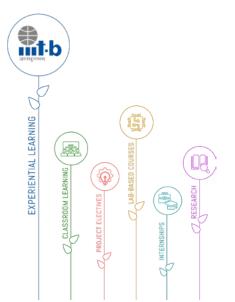


OMBUDSMAN





Dr. K. N. Balasubramanya Murthy, Vice Chancellor of Dayananda Sagar University, Bangalore, and Chairman, Board for IT Education Standards (BITES) took over as **Ombudsman** of IIITB on February 26, 2020.





13 APPOINTMENTS & ADIEU



WELCOME ON BOARD



SI. No	Name	Designation	Date of Joining
1.	Prof Roland Erik Haas	Professor	April 12, 2021
2.	Mr Nithyananda AC	Assistant Accountant (CPE)	May 17, 2021
3.	Prof Nikhil Krishnan	Assistant Professor	July 1, 2021
4.	Prof Prem Singh	Assistant Professor	July 1, 2021
5.	Mr Abhishek Kumar	Technical Assistant	October 1, 2021
6.	Mr Niranjan Anil Shanbhag	Technical Assistant	October 1, 2021
7.	Prof Badrinath Ramamurthy	Professor	December 10, 2021
8.	Prof Vinu Ellampalli Venugopal	Assistant Professor	December 15, 2021
9.	Mr Sathish Veeranan	Technical Lead (Software)	December 20, 2021
10.	Ms Aparna TR	Lab-In-Charge	February 9, 2022
11.	Mr Pavan Patil GM	Lab-In-Charge	February 21, 2022
12.	Mr Biswa Bhusan Dhal	Technical Assistant & Purchase and store	April 1, 2022

ADIEU



SI. No	Name	Designation	Date of Joining	Date of Leaving
1.	Ms Aswini P	Lab-In-Charge	October 15, 2014	December 18, 2021
2.	Prof Chetan Parikh	Professor	July 1, 2015	December 31, 2021
3.	Mr Karthik Kittu	Chief Innovation Officer	October 1, 2019	November 30, 2021
4.	Prof Roland Erik Haas	Professor	April 12, 2021	December 31, 2021
5.	Prof Arti Dilip Yardi	DST-INSPIRE	January 22, 2019	January 22, 2022
6.	Ms Adhisaya T	Lab-In-Charge	July 22, 2013	February 10, 2022
7.	Mr Abhishek Kumar	Technical Assistant	October 1, 2021	April 30, 2022
8.	Mr Vishwanathan MS	Admin Associate (CPE)	October 5, 2020	May 31, 2022
9.	Prof K V Dinesha	Professor	October 1, 1999	June 30, 2022
10.	Mr Adarsh Chowta	Assistant Accountant	June 7, 2019	June 30, 2022
11.	Mr Nithyananda AC	Assistant Accountant (CPE)	May 17, 2021	July 25, 2022



7 A RESEARCH PROJECTS



SALIENT RESEARCH PROJECTS IN VOGUE

IIITB's research focus is to contribute to the IT world by focusing on education and research, entrepreneurship, and innovation. The research Centers at IIITB are multi-disciplinary with participation from several faculty members across different research domains. They could focus on a vertical, such as healthcare, or a horizontal, such as machine intelligence. These centers, run by faculty and driven by students and staff, have active collaborations with academia, government, and industry.



Principal Investigator:

Prof Rajagopalan

Sponsors:

- ▶ Bill and Melinda gates Foundation
- Tata Trust
- Omidyar Network
- Nordic Fund

A country's identification system is the backbone for effective delivery of public and private services. Governments are exploring the development of multipurpose foundational ID systems, in which individuals receive a unique identifier from the government that they can use for identity assertion and verification. The foundational ID can then be used to access a wide variety of government and private

services. As countries consider how best to build foundational ID systems, they face several policy and technological choices.

In response to these challenges, the International Institute of Information Technology, Bangalore (IIITB), a world-renowned technology university, is anchoring the MOSIP project as a global public good.

ADVANCED COMMUNICATION SYSTEMS

Principal Investigator:

Prof Jyotsna Bapat

Sponsor:

Ministry of Science and Technology, Gol

Cyber Physical System (CPS) refers to a platform comprising of a mechanical system that is controlled by computer algorithms, and tightly integrated with Internet and to its networked users. Here, the physical-mechanical components represented by smart sensors and actuators, and the software components

represented by computing and networking devices are intrinsically intertwined in the platform. Wireless sensors and actuators connected by the Internet-of-Things (IoT) are central to the design of advanced cyber physical systems (CPSs).



CENTRE FOR OPEN DATA RESEARCH (CODR)

Principal Investigator:
Prof Srinath Srinivasa

Sponsor:

▶ GoK

The Centre for Open-Data Research is aimed at promoting open-data utilisation through data science research outputs, tools and techniques with an objective to apply the results towards progressing human development or enhancing customer consumption experience. Open-Data is defined as data that is freely available for access, reuse, redistribution for everyone without any restrictions.



CENTER FOR e-GOVERNANCE (CeG) **Principal Investigator:**

Sponsor:

Prof Ramanathan Chandrashekar GoK

The Center is focussing on carrying out research and development of Proof-of-Concepts (POC) in the areas of software architecture, software engineering & standards, advanced computer networking, application modernization using emerging technologies, and other related areas aids CeG to deliver public services more efficiently and innovatively.



INDIA URBAN DATA EXCHANGE

Principal Investigator: Prof Srinath Srinivasa

Sponsor:

Ministry of Housing and Urban
 Affairs & Ministry of Information
 and Electronics Technology

Indian cities need secure and controlled sharing of all types of data. IUDX is developed, maintained and operated by a dedicated team, based in IISc. As a complement to IUDX, IISc has launched the IUDX research program to explore aspects

of data science, privacy & security, economics, policy and regulations that will facilitate the use of data for public good.

IIITB is one of the collaborators contributing to the project.



PROJECT VICT

Principal Investigator:

Prof Amit Prakash

Sponsor:

Microsoft Research Lab India Pvt Ltd &
 Microsoft Corporation (India) Private Limited

IIITB seeks to jointly implement the VICT Project with Microsoft, the proposal for which was submitted in partnership with Vision Empower (VE), a not-for-profit enterprise incubating in the IIITB Innovation Centre, aimed at empowering visually impaired students of K-12 grades by

digitally skilling them, and redefining and updating the Computational Thinking curriculum/course in India, and empowering visually impaired students to access the corresponding modified accessible content identified for the curriculum.



FAIRWORI PROJECT **Principal Investigator:**

Prof Balaji Parthasarathy

Sponsor:

University of Oxford

Fairwork, at its essence, is a way of imagining a different, and fairer, platform economy than the one we have today. By evaluating digital

platforms against measures of fairness in labour practices, we hope to not just show what the platform economy is, but also what it can be.



15 PUBLICATIONS



CONFERENCE PUBLICATIONS



Sachit Rao, Vaibhav Bajaj and Shrisha Rao, "Sliding Mode-Based consensus in the Presence of Byzantine Agents*," in 2021 European Control Conference (ECC), 2021, pp. 1050-1055.

doi: https://doi.org/10.23919/ ECC54610.2021.9654835.

Chirag Samal, Prince Yadav, Sakshi Singh, Satyanarayana Vollala and Amrita Mishra, "RoBINN: Robust Bird Species Identification using Neural Network," in 18th International Conference on Signal Processing and Multimedia Applications, 2021, pp. 31-38.

doi: https://doi.org/10.5220/0010647500310038.

Satya Ganesh Nutan Dev C, Goutham Ponnamreddy and Debabrata Das, "A method to boost throughput in 5G and 4G mobiles using MultiSIM subscription on the same network," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: 1https://doi.org/10.1109/ CONECCT52877.2021.9622612.

Mohgan PD and Debabrata Das, "Efficient way of Non-GBR, High Latency GTP-U Packet Transmission in 4G and 5G Networks," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 4p.

doi: https://doi.org/10.1109/ CONECCT52877.2021.9622673. Akhilesh Kumar and Debabrata Das, "Enhanced VoLTE Medium Access Control Scheduling Algorithm for eMTC Devices," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 5p.

doi: https://doi.org/10.1109/ CONECCT52877.2021.9622349.

Ankush Dua, Prasoon Singh and Jyotsna Bapat, "Location Privacy-Preserving Mechanism - A Data-Driven Approach," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: https://doi.org/10.1109/CONECCT52877.2021.9622598.

Ramkumar Thirumalli Sureshsah. Mohanraja Balasubramaniam and Debabrata Das, "Novel 5G and B5G Network Architecture and Protocol for Multi SIM Devices," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: https://doi.org/10.1109/ CONECCT52877.2021.9622360.

Kopperla Ranjith Kumar, Katyayani Sesha Kumar Kavuluri and Debabrata Das, "Novel Algorithm to Recover the Lost CDR Information by Control and User Planes Separation in 4G and 5G," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: https://doi.org/10.1109/CONECCT52877.2021.9622598.

Kumud Sinha, Tushar Vrind, Lalit Pathak and Debabrata Das, "Novel Algorithms for Efficient Design and Operation of Multi-SIM UE in 5G and Beyond," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: https://doi.org/10.1109/CONECCT52877.2021.9622690.

Sharvari N P, Jyotsna Bapat and Debabrata Das, "Priority based Discrete time Dynamic Routing Algorithm for Emergency Evacuation," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 6p.

doi: https://doi.org/10.1109/CONECCT52877.2021.9622540.

Syam Sidhardhan and Debabrata Das, "Reliable Edge Service for IoT Home Environment," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 4p.

doi: https://doi.org/10.1109/CONECCT52877.2021.9622706.

Balvinder Pal Singh and B Thangaraju, "Thermal Aware Power Save Policy For Hot And Cold Jobs," in IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT 2021), 2021, 4p.

doi: https://doi.org/10.1109/conecct52877.2021.9622715.

Tim Hellemans, Arti Yardi and Tejas Bodas, "Download time analysis for distributed storage systems with node failures," in IEEE International Symposium on Information Theory (ISIT), 2021, pp. 2060-2065.

doi: https://doi.org/10.1109/ISIT45174.2021.9517730.

Sounak Das and Subhajit Sen, "A Multi-phase LC-Ring-Based Voltage Controlled Oscillator," in 10th International Symposium on Embedded Computing and System Design (ISED 2021), 2021, pp. 41-51.

doi: https://doi.org/10.1007/978-981-16-6940-8_4.

Kumar Shubham, Gopalakrishnan Venkatesh, Reijul Sachdev, Akshi, Dinesh Babu Jayagopi and G. Srinivasaraghavan, "Learning a Deep Reinforcement Learning Policy Over the Latent Space of a Pre-trained GAN for Semantic Age Manipulation," in International Joint Conference on Neural Networks (IJCNN), 2021, 8p. doi: https://doi.org/10.1109/IJCNN52387.2021.9533685.

Arinjita Bhattacharyya, Swarup Chattopadhyay, Monalisha Pattnaik and Tanujit Chakraborty, "Theta Autoregressive Neural Network: A Hybrid Time Series Model for Pandemic Forecasting," in International Joint Conference on Neural Networks (IJCNN), 2021, 8p. doi: https://doi.org/10.1109/IJCNN52387.2021.9533747.

Srravya Chandhiramowuli and Bidisha Chaudhuri, "Politics of Data in & as News: A Data Justice Perspective," in 27th annual Americas Conference on Information Systems (AMCIS), 2021.

doi: https://aisel.aisnet.org/amcis2021/global_develop/global_develop/13.

Shaik Mohammed Waseem, Alavala Venkata Suraj and Subir Kumar Roy, "Accelerating the Activation Function Selection for Hybrid Deep Neural Networks – FPGA Implementation," in IEEE Region 10 Symposium (TENSYMP), 2021, 7p.

doi: https://doi.org/10.1109/ TENSYMP52854.2021.9551000. Kumar Murugesan, Kavin Kumar Thangadorai and V N Muralidhara, "PoEx: Proof of Existence for Evil Twin Attack Prevention in Wi-Fi Personal Networks," in 8th International Conference on Future Internet of Things and Cloud (FiCloud), 2021, pp. 92-98.

doi: https://doi.org/10.1109/FiCloud49777.2021.00021.

Gaurav Jain, Sukhdeep Singh and Debabrata Das, "Intelligent live video dispatching framework for work from home setup in 5G Networks," in 8th International Conference on Future Internet of Things and Cloud (FiCloud), 2021, pp. 319-329.

https://doi.org/10.1109/FiCloud49777.2021.00053

Tirthankar Banerjee, Narasimha Rao Thurlapati, V. Pavithra, S. Mahalakshmi, Dhanya Eledath and V. Ramasubramanian, "Few-Shot learning for frame-Wise phoneme recognition: Adaptation of matching networks," in 29th European Signal Processing Conference (EUSIPCO 2021), 2021, pp. 516-520.

doi: http:://10.23919/EUSIPCO54536.2021.9616234.

Dhanya Eledath, P. Inbarajan, Anurag Biradar, Sathwick Mahadeva and V. Ramasubramanian, "End-to-end speech recognition from raw speech: Multi time-frequency resolution CNN architecture for efficient representation learning," in 29th European Signal Processing Conference (EUSIPCO 2021), 2021, pp. 536-540.

doi: http:://10.23919/EUSIPCO54536.2021.9616171.

Manish Gupta, "Workshop Keynote #1: Human-Centric Smart Computing," in 2021 IEEE International Conference on Smart Computing (SMARTCOMP), 2021, pp. 42-42.

doi: https://doi.org/10.1109/SMARTCOMP52413.2021.00093.

Shivani Shah, Vaibhavi Mathur, Sahithi Meenakshi Vutakuru, Kavya Borra and Nanditha P. Rao, "Cacheaccel: FPGA Accelerated Cache Simulator with Partially Reconfigurable Prefetcher," in 24th Euromicro Conference on Digital System Design (DSD), 2021, pp. 97-100.

doi: https://doi.org/10.1109/DSD53832.2021.00024.

Vibhav Agarwal, Pooja Rao and Dinesh Babu Jayagopi, "Towards Code-Mixed Hinglish Dialogue Generation," in The 13th International Conference on Recent Advances in Natural Language Processing (RANLP'2021) - Student Research Workshop, 2021, pp.7-15.

doi: https://doi.org/10.26615/issn.2603-2821.2021_002

Vibhav Agarwal, Pooja Rao and Dinesh Babu Jayagopi, "Hinglish to English Machine Translation using Multilingual Transformers," in The 13th International Conference on Recent Advances in Natural Language Processing (RANLP'2021) - Student Research Workshop, 2021, pp.16-21.

doi: https://doi.org/10.26615/issn.2603-2821.2021_003.

Dhanya Eledath, V. Pavihra, Narasimha Rao Thurlapati, Tirthankar Benerjee and V. Ramasubramanian, "Fewshot Learning for Cross-Lingual End-to-End Speech Recognition," in Workshop on Machine Learning in Speech and Language Processing (MLSLP2021), 2021, 6p.

doi: https://homepages.inf.ed.ac.uk/htang2/sigml/mlslp2021/MLSLP2021_paper_9.pdf.

Srinivasa Raghavan and Kumar Shubham, "Hybrid Unsupervised and Supervised Multitask Learning for Speech Recognition in Low Resource Languages," in Workshop on Machine Learning in Speech and Language Processing (MLSLP2021), 2021, 5p. doi: https://homepages.inf.ed.ac.uk/htang2/sigml/

doi: https://homepages.inf.ed.ac.uk/htang2/sigml/mlslp2021/MLSLP2021 paper 8.pdf.

Aritra Bhowmick, Meenakshi D'Souza and G. Srinivasa Raghavan, "LipBaB: Computing Exact Lipschitz Constant of ReLU Networks," in Artificial Neural Networks and Machine Learning (ICANN 2021), 2021, pp. 151-162.

doi: https://doi.org/10.1007/978-3-030-86380-7_13.

Vandana M. Ladwani and V. Ramasubramanian, "M-ary Hopfield Neural Network Based Associative Memory Formulation: Limit-Cycle Based Sequence Storage and Retrieval," in Artificial Neural Networks and Machine Learning (ICANN 2021), 2021, pp. 420-432.

doi: https://doi.org/10.1007/978-3-030-86380-7_34.

Ankit Yadu, P K Suhas and Neelam Sinha, "Class Specific Interpretability in CNN Using Causal Analysis," in IEEE International Conference on Image Processing (ICIP), 2021, pp. 3702-3706.

doi: https://doi.org/10.1109/ICIP42928.2021.9506118.

Deepti Balaji Raykar and V Sridhar, "Human-Centric Elicitation of Context-Oriented Personal Data Categories: An Exploratory Study in An Educational Institution," in 29th IEEE International Requirements Engineering Conference (RE), 2022, pp. 432-433. doi: http://doi.org/10.1109/RE51729.2021.00056.

G. V. K. Sasirekha, V. Bhanu Prakash, Jyotsna Bapat and Debabrata Das, "Localizing Worst-Parent Rank Attack Using Intelligent Edges of Smart Buildings," in 14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021), 2021, pp. 62-72.

doi: https://doi.org/10.1007/978-3-030-87872-6_7.

Khushboo Yadav, Prem Singh, Himanshu B. Mishra and Rohit Budhiraja, "Closed Form BER For ZF OTFS Receivers," in 22nd International Workshop on Signal Processing Advances in Wireless Communications (SPAWC), 2021, pp.136-140.

doi: http://doi.org/10.1109/SPAWC51858.2021.9593186.

Deepak Kumaraswamy, Shyam Murthy and Srinivas Vivek, "Revisiting Driver Anonymity in Oride," in Selected Areas in Cryptography (SAC 2021), 2021, 23p.

doi: https://ece.engr.uvic.ca/~raltawy/SAC2021/18.pdf.

Ankita Christine Victor and Jaya Sreevalsan-Nair, "Building 3D Virtual Worlds from Monocular Images of Urban Road Traffic Scene," in International Symposium on Visual Computing (ISVC 2021), 2021, pp. 461-474.

doi: https://doi.org/10.1007/978-3-030-90436-4_37.

Nikita Nagaraj and Amit Prakash, "Digital biometric authentication and citizens' right to food: Neglect of the 'local' in India's Aadhaar-enabled Public Distribution System," in 14th International Conference on Theory and Practice of Electronic Governance (ICEGOV 2021), 2021, pp.338-345.

doi: https://doi.org/10.1145/3494193.3494239.

Shyam Krishna, Vijay Vignesh P and Dinesh Babu Jayagopi, "SignPose: Sign Language Animation Through 3D Pose Lifting," in IEEE/CVF International Conference on Computer Vision (ICCV) Workshops, 2021.

doi: SignPose: Sign Language Animation through 3D pose lifting.

Nayna Jain, Karthik Nandakumar, Nalini Ratha, Sharath Pankanti and Uttam Kumar, "Optimizing Homomorphic Encryption based Secure Image Analytics," in 23rd International Workshop on Multimedia Signal Processing (MMSP), 2021, 6p.

doi: https://doi.org/10.1109/MMSP53017.2021.9733620.

Chinmaye R, Chetan D Parikh and Subhajit Sen, "Digital Calibration of 1.5 bits/stage Algorithmic ADC," in 18th International SoC Design Conference (ISOCC), 2021, pp. 3-4.

doi: https://doi.org/10.1109/ISOCC53507.2021.9614017.

Vishal Gattani and Madhav Rao, "An integrated system design interface for operating 8-DoF robotic arm," in 21st International Conference on Control, Automation and Systems (ICCAS 2021), 2021, 6p.

J. Siva Ramakrishna, Neelam Sinha and Hariharan Ramasangu, "Classification of Human Emotions using EEG-based Causal Connectivity Patterns," in IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB 2021), 2021, pp. 1-8.

doi:https://doi.org/10.1109/CIBCB49929.2021.9562837.

K J N S Bhargav, Sairam Palisetti and Madhav Rao, "A Newton Raphson method based approximate divider design for color quantization application," in 18th International SoC Design Conference (ISOCC), 2021, pp. 115-116.

doi: https://doi.org/10.1109/ISOCC53507.2021.9613961.

Kailash Kumar Jha, Nishant, Sidhant Jain, Abhishek Kaswan, Alok Kumar Jangid and Debabrata Das, "User Equipment Based Efficient Protocol to Maximize Throughput in Multi-RAT," in IEEE 4th 5G World Forum (5GWF), 2021, pp. 30-35.

doi: https://doi.org/10.1109/5GWF52925.2021.00013.

B. S Ajay and Madhav Rao, "Design of emotion recognition system using neuromorphic computing technique," in 18th International SoC Design Conference (ISOCC), 2021, pp. 535-541.

doi: https://doi.org/10.1109/ISOCC53507.2021.9614009.

Nishant, Kailash Kumar Jha, Avneesh Tiwari, Alok Kumar Jangid, Aman Agarwal, Nitesh Pushpak Shah and Debabrata Das, "Efficient Protocol to Optimize New Radio Frequency Scanning in 5G Network," in IEEE 4th 5G World Forum (5GWF), 2021, pp. 52-57. doi: https://doi.org/10.1109/5GWF52925.2021.00017.

Amogh Johri, Arti Yardi and Tejas Bodas, "Approximate Gradient Coding for Heterogeneous Nodes," in IEEE Information Theory Workshop (ITW), 2021.

doi: https://doi.org/10.1109/ITW48936.2021.9611493.

Arti Yardi and Tejas Bodas, "Covert queueing problem with a Markovian statistic," in IEEE Information Theory Workshop (ITW), 2021, 6p.

doi: http://doi.org/10.1109/ITW48936.2021.9611410.

Rahil Satyanarayan Vijay, Kumar Shubham, Laetitia Aurelie Renier, Emmanuelle P. Kleinlogel, Marianne Schmid Mastand and Dinesh Babu Jayagopi, "An Opportunity to Investigate the Role of Specific Nonverbal Cues and First Impression in Interviews using Deepfake Based Controlled Video Generation," in International Conference on Multimodal Interaction (ICMI), 2021, pp. 148-152.

doi: https://doi.org/10.1145/3461615.3485397.

Dinesh Babu Jayagopi, "Multimodal Analysis and Synthesis for Conversational Research," in International Conference on Multimodal Interaction (ICMI), 2021, pp. 400-401.

doi: https://doi.org/10.1145/3461615.3486794.

Nayna Jain, Karthik Nandakumar, Nalini Ratha, Sharath Pankanti and Uttam Kumar, "CryptInfer: Enabling Encrypted Inference on Skin Lesion Images for Melanoma Detection," in 1st. International Conference on AI-ML-Systems AIMLSystems, 2021, 7p.

doi: https://doi.org/10.1145/3486001.3486233.

Tirthankar Banerjee, Dhanya Eledath and V. Ramasubramanian, "Few shot learning for cross-lingual isolated word recognition," in 1st. International Conference on AI-ML-Systems (AIMLSystems 2021), 2021, 7p.

doi: https://doi.org/10.1145/3486001.3486235.

Arjun Verma, Prateksha Udhayanan, Rahul Murali Shankar, K N Nikhila and Sujit Kumar Chakrabarti, "Source-Code Similarity Measurement: Syntax Tree Fingerprinting for Automated Evaluation," in 1st. International Conference on Al-ML-Systems AIMLSystems, 2021, 7p.

doi: https://doi.org/10.1145/3486001.3486228.

Prateek Chanda, Amogh Wagh, Jemimah A. Johnson, Swaraj Renghe, Vageesh Chandramouli, George Mathews, Sapna Behar, Poornima Bhola, Girish Rao, Paulomi Sudhir, T. K. Srikanth, Amit Sharma and Seema Mehrotra, "MINDNOTES: A Mobile Platform to enable users to break stigma around mental health and connect with therapists," in Conference on Computer Supported Cooperative Work and Social Computing CSCW '21, 2021, pp. 213-217.

doi: https://doi.org/10.1145/3462204.3482895.

Benedetta Catanzariti, Srravya Chandhiramowuli, Suha Mohamed, Sarayu Natarajan, Shantanu Prabhat, Noopur Raval, Alex S. Taylor andDing Wang, "The Global Labours of Al and Data Intensive Systems," in Conference on Computer Supported Cooperative Work and Social Computing

(CSCW '21), 2021, pp. 319-322.

doi: https://doi.org/10.1145/3462204.3481725.

Jaya Sreevalsan-Nair, Pragyan Mohapatra and Satendra Singh, "IMGD: Image-based Multiscale Global Descriptors of Airborne LiDAR Point Clouds Used for Comparative Analysis," in Smart Tools and Applications in Graphics 2021 (STAG 2021), 2021, pp. 61-72.

doi: https://doi.org/10.2312/stag.20211475.

Biswesh Mohapatra, Sumit Bhatia, Raghava Mutharaju and G. Srinivasaraghavan, "EmELvar: A NeuroSymbolic Reasoner for the EL++ Description Logic," in Semantic Reasoning Evaluation Challenge 2021 (SemREC 2021), 2022, pp. 44-51.

doi: http://ceur-ws.org/Vol-3123/paper6.pdf.

Anjana Prabhakar and Tricha Anjali, "Towards flexible hardware authentication for IoT," in International Symposium on Networks, Computers and Communications (ISNCC), 2021, 6p.

doi: https://doi.org/10.1109/ISNCC52172.2021.9615735.

Vandana M. Ladwani and V. Ramasubramanian, "Harnessing Energy of M-ary Hopfield Neural Network for Connectionist Temporal Sequence Decoding," in 8th International Conference on Mining Intelligence & Knowledge Exploration (MIKE 2021), 2021.

Ragesh Thangavel and Jaya Sreevalsan-Nair, "CV4FEE: Flood Extent Estimation Using Consensus Voting in Ensemble of Methods for Change Detection in Sentinel-1 GRD SAR Images," in 7th Asia-Pacific Conference on Synthetic Aperture Radar (APSAR), 2021, 6p.

doi: http://doi.org/10.1109/APSAR52370.2021.9688390.

Ronak Doshi, Arvind Ram Sankar, Krishna Nagaraj, Vikas Vazhayil, Chandana Nagaraj and Madhav Rao, "EEG Driven Autonomous Injection System For An Epileptic Neuroimaging Application," in 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 1480-1486.

doi:http://doi.org/10.1109/EMBC46164.2021.9629573.

Reddy Rani Vangimalla and Jaya Sreevalsan-Nair, "HCNM: Heterogeneous Correlation Network Model for Multi-level Integrative Study of Multi-omics Data for Cancer Subtype Prediction," in 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 1880-1886.

doi: http://doi.org/10.1109/EMBC46164.2021.9630781.

Ajay Ramesh, Manish Beniwal, Alok Mohan Uppar, Vikas V and Madhav Rao, "Microsurgical Tool Detection and Characterization in Intra-operative Neurosurgical Videos," in 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 2676-2681.

doi: http://doi.org/10.1109/EMBC46164.2021.9630274.

Ajay Ramesh, Viprav B. Raju, Madhav Rao and Edward Sazonov, "Food Detection and Segmentation from Egocentric Camera Images," in 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 2736-2740.

doi: http://doi.org/10.1109/EMBC46164.2021.9630823.

Chakka Sai Pradeep and Neelam Sinha, "Spatio-Temporal Features Based Surgical Phase Classification Using CNNs," 43rd in Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 3332-3335.

doi: http://doi.org/10.1109/EMBC46164.2021.9630829.

Sapparapu Rahul, Chinmayee Sai Vajrala and B. Thangaraju, "A Novel Method of Honeypot Inclusive WAF to Protect from SQL Injection and XSS," in International Conference on Disruptive Technologies for Multi-Disciplinary Research and Applications (CENTCON), 2021, pp. 135-140.

doi: http://doi.org/10.1109/CENTCON52345.2021.9688059.

Ritu Lahoti, Sunil Kumar Vengalil, Punith B Venkategowda, Neelam Sinha and Vinod Veera Reddy, "Whole Tumor Segmentation from Brain MR images using Multi-view 2D Convolutional Neural Network," in 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2021, pp. 4111 - 4114.

doi: http://doi.org/10.1109/EMBC46164.2021.9631035.

Debanjali Bhattacharya and Neelam Sinha, "Scatter Index: An Alternative Measure of Dispersion Based on Relative Frequency of Occurrence of Observations," in Fifth International Conference on Intelligent Computing and Communication (ICICC 2021), 2021, pp. 65-72.

doi: https://doi.org/10.1007/978-981-19-1559-8 7.

Aditya Gulati, Thuy Ngoc Nguyen and Cleotilde Gonzalez, "Task Complexity and Performance in Individuals and Groups Without Communication," in AAAI Fall Symposium, 2021, 8p.

doi: https://www.cmu.edu/dietrich/sds/ddmlab/ papers/2021GulatietalAAAlSymposium.pdf.

Abhishek Narvaria, Uttam Kumar, Kanumuru Shree Jhanwwee, Anindita Dasgupta and Gurdeep Jyoti Kaur, "Classification and Identification of Crops Using Deep Learning with UAV Data," in 2021 IEEE International India Geoscience and Remote Sensing Symposium (InGARSS), 2021, pp. 153-156.

doi: https://doi.org/10.1109/InGARSS51564.2021.9792009.

Vibhav Agarwal, S B Pooja Rao and Dinesh Babu Jayagopi, "Towards Code-Mixed Hinglish Dialogue Generation," in 3rd. Workshop on Natural Language Processing for Conversational Al, 2021, pp. 271-280.

doi: https://aclanthology.org/2021.nlp4convai-1.26.



doi:https://doi.org/10.1109/InGARSS51564.2021.9792041.



Rahisha Thottolil and Uttam Kumar, "Assessment of Topological Pattern of Road Network: A Case Study Of Bangalore City," in 2021 IEEE International India Geoscience and Remote Sensing Symposium (InGARSS), 2021, pp. 246-249.

doi: https://doi.org/10.1109/ InGARSS51564.2021.9792069.

Anindita Dasgupta and Uttam Kumar, "Urban Heat Island and Its Impact On Impervious Surfaces During Two Seasons: A Case Study Of Bangalore," in 2021 IEEE International India Geoscience and Remote Sensing Symposium (InGARSS), 2021, pp. 250-253.

doi: https://doi.org/10.1109/InGARSS51564.2021.9792024.

Pooja Bassin, Niharika Sri Parasa, Srinath Srinivasa and Sridhar Mandyam, "Big Data Management for Policy Support in Sustainable Development," in 9th International Conference on Big Data Analytics - BDA 2021: Big-Data-Analytics in Astronomy, Science, and Engineering, 2021, pp. 3-15.

doi: https://doi.org/10.1007/978-3-030-96600-3 1.

Deeksha Aggarwal, J. Senthilnath, Uttam Kumar, Vivek Yadav, Sushant Kulkarni, Md Meftahul Ferdaus and Li Xiaoli, "SGDOL: Self-evolving Generative and Discriminative Online Learning for Data Stream Classification," in International Conference on Data Mining Workshops (ICDMW), 2021, pp. 322-330.

doi: http://doi.org/10.1109/ICDMW53433.2021.00047.

Bhabesh Mali, Subhashish Dhal and Ananta Kumar Das, "Diagnosis of Asthma in Children Based on Symptoms: A Machine Learning Approach," in IEEE Region 10 Conference (TENCON 2021), 2021, pp. 782-787. doi: http://doi.org/10.1109/TENCON54134.2021.9707283.

Akshi and Madhav Rao, "Decoding Imagined Speech Using Wearable EEG Headset For a Single Subject," in IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2021, pp. 2622-2627.

doi: http://10.1109/BIBM52615.2021.9669361.

Deepak Kumaraswamy and Srinivas Vivek, "Cryptanalysis of the Privacy-Preserving Ride-Hailing Service TRACE," in Progress in Cryptology – INDOCRYPT 2021 22nd International Conference on Cryptology, 2021.

doi: https://doi.org/10.1007/978-3-030-92518-5_21.

Srinivas Vivek, "Attacks on a Privacy-Preserving Publish-Subscribe System and a Ride-Hailing Service," in 18th IMA International Conference, IMACC 2021 - Cryptography and Coding, 2021, pp. 59-71. doi: https://doi.org/10.1007/978-3-030-92641-0_4.

Asoke K. Talukder, Prantar Chakrabarti, Bhaskar Narayan Chaudhuri, Tavpritesh Sethi, Rakesh Lodha and Roland E. Haas, "2Al&7D Model of Resistomics to Counter the Accelerating Antibiotic Resistance and the Medical Climate Crisis," in 9th International Conference on Big Data Analytics (BDA 2021), 0, pp. 44-53.

doi: https://doi.org/10.1007/978-3-030-93620-4_4.

Vibhav Agarwal, Akansha Bhardwaj, Paolo Rosso and Philippe Cudré-Mauroux, "ConvTab: A Context-Preserving, Convolutional Model for Ad-Hoc Table Retrieval," in IEEE International Conference on Big Data (Big Data), 2021, pp. 5043-5052.

doi: http://doi.org/10.1109/BigData52589.2021.9671828.

Sunil Kumar Vengalil and Neelam Sinha, "Semisupervised Learning using Variational Autoencoder – A Cluster based Approach," in Pattern Recognition and Machine Intelligence – 9th International Conference (PReMI 2021), 2021.

Chakka Sai Pradeep and Neelam Sinha, "Multi-Stage Transfer Learning Based Yoga Pose Recognition using CNN," in Pattern Recognition and Machine Intelligence – 9th International Conference (PReMI 2021), 2021.

Harsh Kumar, Atul Ramesh Jadhav, Sasirekha GVK, Jyotsna Bapat and Debabrata Das, "Intelligent Edge Detection of Attacks on IP-based IoT deployments," in 19th OITS International Conference on Information Technology (OCIT), 2021, pp. 132-137.

doi: http://doi.org/10.1109/OCIT53463.2021.00036.

Sunil Kumar Vengalil, Kevin Xavier, Amith Konda Sai, Sree Koyi Harsha, Ganesh Barma and Neelam Sinha, "A Hybrid Approach for Table Detection in Document Images," in 5th Workshop on Document Analysis and Recognition, 2021.

Sajitha Adidela, Sakshi Singh, Tina Sahu and Amrita Mishra, "Single Image And Video Dehazing: A Dark Channel Prior (DCP)-based Approach," in IEEE 18th India Council International Conference (INDICON), 2021, 6p.

doi: http://doi.org/10.1109/ INDICON52576.2021.9691546.

Ammu R, Rajikha Raja, Neelam Sinha and Jitender Saini, "Analysis of vascular dysregulation caused by infiltrating glioma cells using bold fMRI," in 12th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP '21), 2021, 7p.

doi: https://doi.org/10.1145/3490035.3490276.

Shyam Krishna, Janmesh Ukey and Dinesh Babu Jayagopi, "GAN based Indian sign language synthesis," in 12th Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP '21), 2021. 8p.

doi: https://doi.org/10.1145/3490035.3490301.

Risikesh RK, Sharad Sinha and Nanditha Rao, "Variable Bit-Precision Vector Extension for RISC-V Based Processors," in IEEE 14th International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC), 2021, pp. 114-121.

doi: http://doi.org/10.1109/MCSoC51149.2021.00024.

Apurva Kulkarni and Chandrashekar Ramanathan, "HS-PARAM: Hive-Spark Parameterization Framework to Optimize Ingestion and Storage of Heterogeneous Data," in 14th International Conference on COMmunication Systems & NETworkS (COMSNETS), 2022, pp. 227-230. doi: http://doi.org/10.1109/ COMSNETS53615.2022.9668594.

Apurva Kulkarni and Chandrashekar Ramanathan, "CDEF: Conceptual Data Extraction Framework for Heterogeneous Data," in 14th International Conference on COMmunication Systems & NETworkS (COMSNETS), 2022, pp. 329-331.

doi: http://doi.org/10.1109/ COMSNETS53615.2022.9668565.

Ishaan Lodha, Lakshana Kolur, Keerthan Krishnan, Kumar Dheenadayalan, Dinkar Sitaram and Siddhartha Nandi, "Cost-Optimized Video Transfer using Real-Time Super Resolution Convolutional Neural Networks," in 5th Joint International Conference on Data Science & Management of Data (9th ACM IKDD CODS and 27th COMAD) - CODS-COMAD 2022, 2022, pp. 213-221.

doi: https://doi.org/10.1145/3493700.3493731.

Aparna Lalingkar, Parithimalan Arulchelvan, Advait Lonkar, Prakhar Mishra, Sridhar Mandyam and Srinath Srinivasa, "Discussion Forum Analyzer: A tool for finding the quality of affirmation and identifying points of intervention in an academic discussion forum," in 5th Joint International Conference on Data Science & Management of Data (9th ACM IKDD CODS and 27th COMAD) - CODS-COMAD 2022, 2022, pp. 246–249.

doi: https://doi.org/10.1145/3493700.3493734.

Nayna Jain, Karthik Nandakumar, Nalini Ratha, Sharath Pankanti and Uttam Kumar, "PPDL - Privacy Preserving Deep Learning using Homomorphic Encryption," in 5th Joint International Conference on Data Science & Management of Data (9th ACM IKDD CODS and 27th COMAD) - CODS-COMAD 2022, 2022, pp. 318-319.

doi: https://doi.org/10.1145/3493700.3493760.

Deeksha Aggarwal, Uttam Kumar and J. Senthilnath, "Towards Building a Flexible Online Learning Model for Data Stream Classification," in 5th Joint International Conference on Data Science & Management of Data (9th ACM IKDD CODS and 27th COMAD) - CODS-COMAD 2022, 2022, pp. 320-321.

doi: https://doi.org/10.1145/3493700.3493761.

Deepti Balaji Raykar and V. Sridhar, "Elicitation of Personal Data Categories for Implementing Data Protection: An Exploratory Study in an Educational Institution," in 15th Innovations in Software Engineering Conference ISEC 2022, 2022, 10p. doi: https://doi.org/10.1145/3511430.3511443.

Christa Hoffmann, Roland Haas, Nidhish Bhimrajka and Naga Srihith Penjarla, "Cyberattacks in agribusiness," in 42nd Annual Conference of the Society for Computer Science in Agriculture, Forestry and Food Sector (GIL), 2022, pp. 117-122. doi: https://dl.gi.de/handle/20.500.12116/38381.

Reena Mamgain and Jyotsna Bapat, "Improved Target Localization in Multistatic Radar Using Least Squares Method," in 2022 IEEE Aerospace Conference (AERO), 2022, 6p.

doi: https://10.1109/AERO53065.2022.9843514.

Ammu Raju and Neelam Sinha, "Transfer Learning for Fundus Image Quality Assessment Using Discriminating Patches," in 19th International Symposium on Biomedical Imaging (ISBI), 2022, 4p. doi: https://doi.org/10.1109/ISBI52829.2022.9761559.

Chakka Sai Pradeep and Neelam Sinha, "Multi-Tasking DSSD Architecture for Laparoscopic Cholecystectomy Surgical Assistance Systems," in 19th International Symposium on Biomedical Imaging (ISBI), 2022, 4p.

doi: https://doi.org/10.1109/ISBI52829.2022.9761562.

Varsha P Suresh, Rekha Pai, Deepak D'Souza, Meenakshi D'Souza and Sujit Kumar Chakrabarti, "Static Race Detection for Periodic Programs," in 31st European Symposium on Programming (ESOP 2022) - Programming Languages and Systems, 2022, pp. 290-316.

doi: https://doi.org/10.1007/978-3-030-99336-8 11.

Alok Parmar, Kailash Prasad, Nanditha Rao and Joycee Mekie, "FastMem: A Fast Architecture-aware Memory Layout Design," in 2022 23rd International Symposium on Quality Electronic Design (ISQED), 2022, pp. 120-126.

doi: https://doi.org/10.1109/ ISQED54688.2022.9806258. Shashank Tiwari, Prem Singh and Rohit Budhiraja, "Low-Complexity LMMSE Receiver for Practical Pulse-Shaped MIMO-OTFS Systems," in IEEE Wireless Communications and Networking Conference (WCNC), 2022, pp. 1365-1370.

doi: https://doi.org/10.1109/WCNC51071.2022.9771912.

Neeta Jha, Amrita Mishra, Jyotsna Bapat and Debabrata Das, "Fast Beam Search with Two-Level Phased Array in Millimeter-Wave Massive MIMO: A Hierarchical Approach," in IEEE Wireless Communications and Networking Conference (WCNC), 2022, pp. 1371-1376.

doi: https://doi.org/10.1109/WCNC51071.2022.9771596.

Chinchu Thomas, Seetharamraju Puraj and Dinesh Babu Jayagopi, "Student Engagement from Video using Unsupervised Domain Adaptation," in 2nd International Conference on Image Processing and Vision Engineering (IMPROVE 2022), 2022, pp. 118-125.

doi: https://doi.org/ 10.5220/0000159200003209.

C K Vinay, Praveen Kallam, Jayanthi Kallam and Madhav Rao, "An autonomous bird monitoring and food intake recording feeder system towards effective rehabilitation," in 2022 IEEE International Systems Conference (SysCon), 2022, 5p.

doi: https://doi.org/10.1109/SysCon53536.2022.9773792.

Pavan Kumar Pothula, Sriram Marisetty and Madhav Rao, "A Real-Time Seizure Classification System Using Computer Vision Techniques," in 2022 IEEE International Systems Conference (SysCon), 2022, 6p.

doi: https://doi.org/10.1109/SysCon53536.2022.9773923.

Avik Bhatnagar, Pratyush Nandi, Anubhav Mishra and Madhav Rao, "Design of a CNN based autonomous inseat passenger anomaly detection system," in 2022 IEEE International Systems Conference (SysCon), 2022, 7p.

doi: https://doi.org/10.1109/SysCon53536.2022.9773868.

Gopalakrishnan Venkatesh, Abhik Jana, Steffen Remus, Özge Sevgili, Gopalakrishnan Srinivasaraghavan and Chris Biemann, "Using distributional thesaurus to enhance transformer-based contextualized representations for low resource languages," in 37th ACM/SIGAPP Symposium on Applied Computing (SAC '22), 2022, pp. 845-852.

doi: https://doi.org/10.1145/3477314.3507077.

Dietmar P. F. Möller, Hamid Vakilzadian and Roland E. Haas, "From Industry 4.0 towards Industry 5.0," in 2022 IEEE International Conference on Electro Information Technology (eIT), 2022, pp. 61-68.

doi: https://doi.org/10.1109/eIT53891.2022.9813831.

Dietmar P. F. Möller, Hamid Vakilzadian and Roland E. Haas, "Cybersecurity Certificate in Digital Transformation," in 2022 IEEE International Conference on Electro Information Technology (eIT), 2022, pp. 556-561.

doi: https://doi.org/10.1109/eIT53891.2022.9813932.

Ravi Shankar, GVK Sasirekha, Chandrashekar Ramanathan and Jyotsna Bapat, "2022 IEEE 5th International Conference on Industrial Cyber-Physical Systems (ICPS)," in 2022 IEEE 5th International Conference on Industrial Cyber-Physical Systems (ICPS), 2022, 6p.

doi: https://doi.org/10.1109/ICPS51978.2022.9817008.

H C Prashanth and Madhav Rao, "Evolutionary Standard Cell Synthesis of Unconventional Designs," in GLSVLSI '22: Proceedings of the Great Lakes Symposium on VLSI, 2022, pp. 189–192.

doi: https://doi.org/10.1145/3526241.3530353.

H C Prashanth, S R Soujanya, Bindu G Gowda and Madhav Rao, "Design and Evaluation of In-Exact Compressor based Approximate Multipliers," in GLSVLSI '22: Proceedings of the Great Lakes Symposium on VLSI, 2022, pp. 431-436.

doi: https://doi.org/10.1145/3526241.3530320.

Omkar G. Ratnaparkhi and Madhav Rao, "LEAD: Logarithmic Exponent Approximate Divider For Image Quantization Application," in GLSVLSI '22: Proceedings of the Great Lakes Symposium on VLSI, 2022, pp. 437-442.

doi: https://doi.org/10.1145/3526241.3530323.

Siri Chandana Daggubati and Jaya Sreevalsan-Nair, "ACCirO: A System for Analyzing and Digitizing Images of Charts with Circular Objects," in 22nd International Conference on Computational Science – ICCS 2022, 2022, pp. 605-612.

doi: https://doi.org/10.1007/978-3-031-08757-8_50.

Vinayak Ramkumar, M. Nikhil Krishnan, Myna Vajha and P Vijay Kumar, "On Information-Debt-Optimal Streaming Codes With Small Memory," in 2022 IEEE International Symposium on Information Theory (ISIT), 2022, pp. 1578-1583.

doi: https://doi.org/10.1109/ISIT50566.2022.9834842.

Gustavo Facenda, Elad Domanovitz, Nikhil Krishnan Muralee Krishnan, Ashish Khisti, Silas L. Fong, Wai-Tian Tan and John Apostolopoulos, "On State-Dependent Streaming Erasure Codes Over the Three-Node Relay Network," in 2022 IEEE International Symposium on Information Theory (ISIT), 2022, pp. 1951-1956.

doi: https://doi.org/10.1109/ISIT50566.2022.9834704.

Devansh Mehta, Vishnu Prasad, Tarun Chitta, Nenavath Srinivas Naik, Amit Prakash and Aditya Vashistha, "Mobilizing Digital Volunteers to Support Underserved Communities in India During COVID-19 Lockdowns," in ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies - COMPASS '22, 2022, pp. 180-194.

doi: https://doi.org/10.1145/3530190.3534827.

V. P. Abidha, Pradeesha Ashok, Avi Tomar and Dolly Yadav, "Coloring a Dominating Set Without Conflicts: q-Subset Square Coloring," in 17th International Computer Science Symposium in Russia, CSR 2022, 2022, pp. 17-34.

doi: https://doi.org/10.1007/978-3-031-09574-0_2.

Varsha P Suresh, Sujit Kumar Chakrabarti, Athul Suresh and Raoul Jetley, "WBS: Weighted Backtracking Strategy for Symbolic Testing of Embedded Software," in 34th International Conference on Software Engineering & Knowledge Engineering (SEKE 2022), 2022, pp. 172-177.

doi: https://doi.org/10.18293/SEKE2022.

Darshil Shah, Gopan K Gopika and Neelam Sinha, "Analysis of EEG for Parkinson's Disease Detection," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p. doi: https://doi.org/10.1109/SPCOM55316.2022.9840776.

Gopan K Gopika, Pavan Sudeesh Peruru and Neelam Sinha, "Modified U-Net Based Covid-19 Lesion Segmentation Using CT Scans," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi:https://doi.org/10.1109/SPCOM55316.2022.9840780.

Snigdha Agarwal, Chakka Sai Pradeep and Neelam Sinha, "Temporal Surgical Gesture Segmentation and Classification in Multi-gesture Robotic Surgery using Fine-tuned features and Calibrated MS-TCN," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi: https://doi.org/10.1109/SPCOM55316.2022.9840779.

Appalla Lakshmi Prathyusha and Priyanka Das, "Outage Performance of Optimal Relay and Antenna Selection Schemes with TAS/MRC and TAS/SC for Spectrum-Sharing Network under Imperfect CSI," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p. doi: https://doi.org/10.1109/SPCOM55316.2022.9840842.

Murali Krishna Pavuluri, Prem Singh, Aditya K Jagannatham and Vikram M. Gadre, "Semi-Blind Technique for Frequency Selective Channel Estimation in Millimeter-Wave MIMO Coded FBMC System," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi: https://doi.org/10.1109/SPCOM55316.2022.9840787.

Vikram R. Lakkavalli, "AbS for ASR: A New Computational Perspective," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi: https://doi.org/10.1109/SPCOM55316.2022.9840830.

Manjeer Majumder, Amrita Mishra and Aditya K. Jagannatham, "Optimal Training Design for Channel Estimation in MIMO Single/Multi Carrier Block Transmission Systems," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi: https://doi.org/10.1109/SPCOM55316.2022.9840846.

Priyanka Das and Pradyumna Hegade, "Secrecy Performance with Optimal Relay and Antenna Selection in Spectrum-Sharing Networks," in 2022 IEEE International Conference on Signal Processing and Communications (SPCOM), 2022, 5p.

doi: https://doi.org/10.1109/ SPCOM55316.2022.9840825.

Dhvani Katkoria and Jaya Sreevalsan-Nair, "RoSELS: Road Surface Extraction for 3D Automotive LiDAR Point Cloud Sequence," in 3rd International Conference on Deep Learning Theory and Applications (DeLTA 2022), 2022, pp. 55-67. doi: https://doi.org/10.5220/0011301700003277.

Ananya Appan, Anirudh Chandramouli and Ashish Choudhury, "Perfectly-Secure Synchronous MPC with Asynchronous Fallback Guarantees," in 2022 ACM Symposium on Principles of Distributed Computing (PODC 2022), 2022, pp. 92-102. doi: https://doi.org/10.1145/3519270.3538417.

Prakhar Mishra, Chaitali Diwan, Srinath Srinivasa and G. Srinivasaraghavan, "A Semi-automatic Approach for Generating Video Trailers for Learning Pathways," in 23rd International Conference on Al in Education (AIED 2022), 2022, pp. 302-305.

doi: https://doi.org/10.1007/978-3-031-11647-6_57.

Niharika Sri Parasa, Chaitali Diwan and Srinath Srinivasa, "Automatic Riddle Generation for Learning Resources," in 23rd International Conference on AI in Education (AIED 2022), 2022, pp. 343-347.

doi: https://doi.org/10.1007/978-3-031-11647-6_66.

Nikhila, K. N and Sujit Kumar Chakrabarti, "LetGrade: An Automated Grading System for Programming Assignments," in 23rd International Conference on Al in Education (AIED 2022), 2022, pp. 383-386.

doi: https://doi.org/10.1007/978-3-031-11647-6_75.



JOURNALS & MAGAZINE ARTICLES

K. Vinay, Krishna Nagaraj, H. R. Arvinda, V. Vikas and Madhav Rao, "Design of a Device for Lower Limb Prophylaxis and Exercise," IEEE Journal of Translational Engineering in Health and Medicine, vol. 9, Article no. 2100107, 2021.

doi: https://doi.org/10.1109/JTEHM.2020.3037018.

R.S.Chidhananda and Apurva Kulkarni, "Application of automation strategies to prevent failure in mechatronic water plant system," Materials Today: Proceedings, vol.37, part.2, pp. 1480-1485, 2021.

doi: https://doi.org/10.1016/j.matpr.2020.07.105.

Tushar Vrind, Lalit Pathak and Debabrata Das, "ACC: Aerial Cell Cloning protocol for efficient session continuity in LAP replacement for 6G," Array, vol. 10, July 2021, Article no. 10061.

doi: https://doi.org/10.1016/j.array.2021.100061.

Sridhar Mandyam K, Anjan Kumar Dasgupta, Usha Sridhar, Panini Dasgupta and Amlan Chakrabarti, "Network approaches in anomaly detection for disease conditions," Biomedical Signal Processing and Control, vol. 68, July 2021, Article no. 102659.

doi: https://doi.org/10.1016/j.bspc.2021.102659.

Emilyn Costa Conceição, Richard Steiner Salvato, Karen Machado Gomes, Arthur Emil dos Santos Guimarães, Marília Lima da Conceição, Ricardo José de Paula Souza e Guimarães, Abhinav Sharma, et.al., "Molecular epidemiology of Mycobacterium tuberculosis in Brazil before the whole genome sequencing era: A literature review," Mem Inst Oswaldo Cruz, Rio de Janeiro, vol. 116, 2021, Article no. e200517.

doi: http://dx.doi.org/10.1590/0074-02760200517.

KEManjunath, KM Srinivasa Raghavan, K. Sreenivasa Rao, Dinesh Babu Jayagopi and V. Ramasubramanian, "Approaches for Multilingual Phone Recognition in Code-switched and Non-code-switched Scenarios Using Indian Languages," ACM Transactions on Asian and Low-Resource Language Information Processing, vol. 20, no.4, pp.1-19, July 2021.

doi: https://doi.org/10.1145/3437256.

Ashutosh Trivedi, Nanda Kishore Sreenivas and Shrisha Rao, "Modeling the spread and control of COVID-19," Systems, vol. 9, no.3, Article 53, July 2021.

doi: https://doi.org/10.3390/systems9030053.

Annapurna Valiveti and Srinivas Vivek, "Higher-Order Lookup Table Masking in Essentially Constant Memory," IACR Transactions on Cryptographic Hardware and Embedded Systems, vol. 2021, no. 4, pp. 546–586, July 2021.

doi: https://doi.org/10.46586/tches.v2021.i4.546-586.

Debabrata Das, "Gearing up for auto-pilot mode," Voice and Data, vol. 38, no. 7, July 2021.

doi: https://www.voicendata.com/gearing-auto-pilot-mode

Pankaj Kumar, Sam Darshi and Samar Shailendra, "Impact of channel correlation on network coded cooperation with two sources," Physical Communication, vol. 47, August 2021, Article no. 101374.

doi: https://doi.org/10.1016/j.phycom.2021.101374.

V. Sridhar, "Together we can go digital," Voice and Data, vol. 28, no. 8,pp. 50-51, August 2021.

doi: https://www.voicendata.com/together-can-go-digital

Balachandra Kumaraswamy and P G Poonacha, "Deep Convolutional Neural Network for musical genre classification via new Self Adaptive Sea Lion Optimization," Applied Softcomputing, vol. 107, September 2021, Article No. 107446.

doi: https://doi.org/10.1016/j.asoc.2021.107446.

Jillet Sarah Sam, Anwesha Chakraborty and Janaki Srinivasan, "Cashlessness in India: Vision, policy and practices," Telecommunications Policy, vol. 45, no. 8, September 2021, Article 102169.

doi: https://doi.org/10.1016/j.telpol.2021.102169.

M. Nikhil Krishnan, Erfan Hosseini and Ashish Khisti, "Coded Sequential Matrix Multiplication for straggler mitigation," IEEE Journal on Selected Areas in Information Theory, vol. 2, no. 3, pp. 830-844, September 2021.

doi: https://doi.org/10.1109/jsait.2021.3104970.

M. Nikhil Krishnan, Erfan Hosseini and Ashish Khisti, "Sequential gradient coding for Packet-Loss Networks," IEEE Journal on Selected Areas in Information Theory, vol. 2, no. 3, pp. 919-930, September 2021.

doi: https://doi.org/10.1109/jsait.2021.3102853.

Maria R. Lima, Maitreyee Wairagkar, Manish Gupta, Ferdinando Rodriguez Y Baena, Payam Barnaghi, David J. Sharp and Ravi Vaidyanathan, "Conversational affective social robots for ageing and dementia support," IEEE Transactions on Cognitive and Developmental Systems, Online September 2021.

doi: https://doi.org10.1109/TCDS.2021.3115228.

V. Sridhar and Rohit Prasad, "Analysis of spectrum pricing for commercial mobile services: A cross country study," Telecommunications Policy, vol. 45, no. 9, October 2021, Article no. 102221.

doi: https://doi.org/10.1016/j.telpol.2021.102221.

Jayati Deshmukh, Srinath Srinivasa and Sridhar Mandyam, "What Keeps a vibrant population together?," Complex Systems, vol. 30, no. 3, pp. 347-373, 2021.

doi: https://doi.org/10.25088/ ComplexSystems.30.3.347.

Aditya Hegde, Helen Möllering, Thomas Schneider and Hossein Yalame, "SoK: Efficient Privacy-preserving Clustering," Proceedings on Privacy Enhancing Technologies, vol.2021, no.4, pp.225-248, October 2021.

doi: https://doi.org/10.2478/popets-2021-0068.

Sarthak Khoche, K. Vinay Chandrasekhar, G. V. K. Sasirekha, Jyotsna Bapat and Debabrata Das, "Occupancy detection for emergency management of smart building based on indoor localization," SN Computer Science, vol. 2, no. 6, November 2021, Article no. 419.

doi: https://doi.org/10.1007/s42979-021-00812-4.

Amit Samanta, Bighnaraj Panigrahi, Hemant Kumar Rath and Samar Shailendra, "On Low Latency Uplink Scheduling for Cellular Haptic Communication to support tactile internet," Wireless Personal Communications, vol. 121, no.3, pp. 1471-1488, December 2021 (First published Online July 12, 2021). doi: https://doi.org/10.1007/s11277-021-08680-0.

Mahdi Haghifam, M. Nikhil Krishnan et.al., "On streaming codes with unequal error protection," IEEE Journal on Selected Areas in Information Theory, vol.2, no. 4, pp. 1165-1179, December 2021.

doi: https://doi.org/10.1109/JSAIT.2021.3126687.

Divya Sharma and Shrisha Rao, "Scheduling Computing loads for improved utilization of Solar Energy," Sustainable Computing Informatics and Systems, vol. 32, December 2021, Article no. 100592.

doi: https://doi.org/10.1016/j.suscom.2021.100592.

Prateksha Udhayanan, Swasti S. Mishra and Shrisha Rao, "Firm dynamics and employee performance management in duopoly markets," Physica - A Statistical Mechanics and its Applications, vol. 583, December 2021, Article no. 126298.

doi: https://doi.org/10.1016/j.physa.2021.126298.

Balaji Parthasarathy, Supriya Dey and Pranjali Gupta, "Overcoming wicked problems and institutional voids for social innovation: University-NGO partnerships in the Global South," Technological Forecasting and Social Change, vol. 173, December 2021, Article no. 121104.

doi: https://doi.org/10.1016/j.techfore.2021.121104.

Guo-Rong Wua, Nigel Colenbier, Sofie Van Den Bossche, Kenzo Clauw, Amogh Johri, Madhur Tandon and Daniele Marinazzo, "rsHRF: A Toolbox for Resting-State HRF Estimation and Deconvolution," Neuroimage, vol. 244, December 2021, Article no. 118591.

doi: https://doi.org/10.1016/j.neuroimage.2021.118591.

Prakhar Mishra, Chaitali Diwan, Srinath Srinivasa and G. Srinivasaraghavan, "Automatic Title Generation for Learning Resources and Pathways with Pretrained Transformer Models," International Journal of Semantic Computing - Special Issue on Selected Papers from 15th IEEE International Conference on Semantic Computing (ICSC 2021), vol. 15, no. 4,pp. 487-510, December 2021.

doi: https://doi.org/10.1142/S1793351X21400134.

Debanjali Bhattacharya, Neelam Sinha and Jitender Saini, "Determining chromosomal arms 1p/19q co-deletion status in low graded glioma by cross correlation-periodogram pattern analysis," Scientific Reports, vol. 11, no.1, December 2021, Article no. 23866.

doi: http://doi.org/10.1038/s41598-021-03078-1.

Arunkumar Kalakanti and Shrisha Rao, "A Hybrid cooperative method with lévy flights for Electric Vehicle charge scheduling," IEEE Transactions on Intelligent Transportation Systems, Online December 2021. doi: http://doi.org/10.1109/TITS.2021.3127352.

doi: http://doi.org/10.1109/TCSS.2022.3140779.

Social Systems, Online January 2022.

Arun Kumar Kalakanti and Shrisha Rao, "Charging Station planning for Electric Vehicles," Systems, vol. 10, no. 1, pp. 22, January 2022.

Ammu Raju and Neelam Sinha, "SSEGEP: Small Segment Emphasized Performance EvaluationMetric for Medical Image Segmentation," Journal of Machine Learning in Fundamental Sciences, vol. 2022, no. 1, 15p., February 2022.

Pradeesha Ashok, Sudeshna Kolay, Neeldhara Misra

and Saket Saurabh, "Exact Multi-Covering Problems with Geometric Sets," Theory of Computing Systems,

vol. 66, no.1, pp. 89-113, February 2022 (First Published

doi: https://doi.org/10.3390/systems10010006.

doi: https://doi.org/10.31526/jmlfs.2022.229.

Haimonti Dutta and Aayushee Gupta, "PNRank: Unsupervised ranking of person name entities from noisy OCR text," Decision Support Systems, vol. 152, January 2022, Article no. 113662.

Online July 2021).

doi: https://doi.org/10.1016/j.dss.2021.113662.

doi: https://doi.org/10.1007/s00224-021-10050-z.

Prem Singh, Abhishek Gupta, Himanshu B. Mishra and Rohit Budhiraja, "Low-Complexity ZF/MMSE MIMO-OTFS Receivers for High-Speed Vehicular Communication," IEEE Open Journal of the Communications Society, vol.3, pp. 209-227, 2022.

Anirudh Chandramouli, Ashish Choudhury and Arpita Patra, "A Survey on Perfectly-Secure Verifiable Secret-Sharing," ACM Computing Surveys (CSUR), Online February 2022 (Accepted).

doi: http://doi.org/10.1109/OJCOMS.2022.3147569.

doi: https://doi.org/10.1145/3512344.

Pradeesha Ashok, Rathin Bhargava, Naman Gupta, Mohammad Khalid and Dolly Yadav, "Structural parameterization for minimum conflict-free colouring," Discrete Applied Mathematics, Online January 2022, (In Press).

technique for pipelined ADCs using a non-nested algorithm," Analog Integrated Circuits and Signal Processing, vol. 110, no.3, pp. 557-568, March 2022. (First published Online during January 2022).

Chinmaye Ramamurthy, Surya Padma, Chetan Parikh

and Subhajit Sen, "A deterministic digital calibration

doi: https://doi.org/10.1016/j.dam.2021.12.026.

doi: https://doi.org/10.1007/s10470-021-01961-5.

Ronak Doshi, Ajay Ramesh and Shrisha Rao, "Modeling influencer marketing campaigns in social networks," IEEE Transactions on Computational Debabrata Das, "The bars have been raised,"
Dataquest, vol. 39, no. 3, March 2022.
doi: https://www.dqindia.com/the-bars-have-been-raised

Ramesh Kestur, Anjali Kulkarni, Rahul Bhaskar, Prajwal Sreenivasa, Dasari Dhanya Sri, Anubhaw Choudhary, Baluvaneralu V. Balaji Prabhu, Gautham Anand and Omkar Narasipura, "MangoGAN: a general adversarial network-based deep learning architecture for mango tree crown detection," Journal of Applied Remote Sensing, vol. 16, no. 1, 15p., March 2022.

doi: https://doi.org/10.1117/1.JRS.16.014527.

Aparna Lalingkar, Vyom Audichya, Prakhar Mishra, Sridhar Mandyam and Srinath Srinivasa, "Models for finding quality of affirmation and points of intervention in an academic discussion forum," Computers and Education: Artificial Intelligence, vol.3, 2022, Article No. 100046.

doi: https://doi.org/10.1016/j.caeai.2022.100046.

Karishma and Shrisha Rao, "Cooperative solutions to exploration tasks under speed and budget constraints," Journal of Simulation, Online March 2022. doi: https://doi.org/10.1080/17477778.2022.2043792.

Deep Inder Mohan, Arjun Verma and Shrisha Rao, "Modelling Prejudice and its effect on societal prosperity," Journal of Simulation, Online March 2022. doi: https://doi.org/10.1080/17477778.2022.2039570.

Himanshu B. Mishra, Prem Singh, Abhishek K. Prasad and Rohit Budhiraja, "OTFS Channel estimation And data detection designs with superimposed pilots," IEEE Transactions on Wireless Communications, vol. 21, no.4, pp. 2258-2274, April 2022 (First published Online during September 2021).

doi: https://doi.org/10.1109/TWC.2021.3110659.

Parthiban Annamalai, Jyotsna Bapat and Debabrata Das, "Resource allocation algorithm for Hybrid IBFD cellular networks for 5G and Beyond," IEEE Transactions on Wireless Communications, vol. 21, no. 4, pp. 2414-2429, April 2022 (First published Online during September 2021).

doi: https://doi.org/10.1109/TWC.2021.3112132.

Prem Singh, Khushboo Yadav, Himanshu B. Mishra and Rohit Budhiraja, "BER Analysis For OTFS Zero Forcing Receiver," IEEE Transactions on Communications, vol. 70, no.4, pp. 2281-2297, April 2022. (First published Online during February 2022).

doi: http://doi.org/10.1109/TCOMM.2022.3148363.

Bidisha Chaudhuri, "Programmed welfare: An ethnographic account of algorithmic practices in the public distribution system in India," New Media & Society, vol. 24, no. 4, pp. 887-902, April 2022.

doi: https://doi.org/10.1177/14614448221079034.

Sachit Rao and Navita Parthasarathy, "Characterizing the over-indebted: An event history Analysis of financial diaries," Journal of Emerging Market Finance, Online April 2022.

doi: https://doi.org/10.1177/09726527221079957.

Jhalak Sharma and Nandita Rao, "The characterization of errors in an FPGA-Based RISC-V processor due to single event transients," Microelectronics Journal, vol. 123, May 2022, Article no. 105392.

doi: https://doi.org/10.1016/j.mejo.2022.105392.

Vinayak Ramkumar, S. B. Balaji, Birenjith Sasidharan, Myna Vajha, M. Nikhil Krishnan and P. Vijay Kumar, "Codes for Distributed Storage," Foundations and Trends® in Communications and Information Theory, vol. 19, no. 4, pp 547-813, May 2022.

doi: http://dx.doi.org/10.1561/0100000115.

V. P. Abidha and Pradeesha Ashok, "Geometric separability using orthogonal objects," Information Processing Letters, vol. 176, June 2022, Article No. 106245.

doi: https://doi.org/10.1016/j.ipl.2022.106245.

K Gopika Gopan, S.V.R. Aditya Reddy, Madhav Rao and Neelam Sinha, "Analysis of Single Channel Electroencephalographic Signals for visual creativity: A pilot study," Biomedical Signal Processing and Control, vol. 75, May 2022, Article No. 103542.

doi: https://doi.org/10.1016/j.bspc.2022.103542.

Prem Singh, Suraj Srivastava, Amrita Mishra, Aditya K. Jagannatham and Lajos Hanzo, "Sparse Bayesian Learning Aided estimation of Doubly-Selective MIMO channels for filter bank multicarrier systems," IEEE Transactions on Communications, vol. 70, no.6,pp. 4236-4249, June 2022. (First published Online during May 2022).

doi: https://doi.org/10.1109/TCOMM.2022.3171815.

Chinchu Thomas and Dinesh Babu Jayagopi, "Predicting presentation skill of a speaker using automatic speaker and audience measurement," IEEE Transactions on Learning Technologies, Online May 2022.

doi: https://doi.org/10.1109/TLT.2022.3171601.

Parthiban Annamalai, Jyotsna Bapat and Debabrata Das, "UE Grouping algorithms to maximize frequency sharing in Hybrid IBFD networks," IEEE Transactions on Wireless Communications, Online June 2022.

doi: https://doi.org/10.1109/TWC.2022.3178517.

Anjana Prabhakar and Tricha Anjali, "URJA: A sustainable energy distribution and trade model for smart grids," Blockchain: Research and Applications, Online May 2022.

doi: https://doi.org/10.1016/j.bcra.2022.100090.

Chinchu Thomas, K.A.V. Puneeth Sarma, Srujan Swaroop Gajula and Dinesh Babu Jayagopi, "Automatic prediction of presentation style and student engagement from videos," Computers and Education: Artificial Intelligence, vol.3, 2022, Article No. 100079.

doi: https://doi.org/10.1016/j.caeai.2022.100079.

Prachi Dhamange, Sarthak Soni, V. Sridhar and Shrisha Rao, "Market dynamics and regulation of a Crowd-Sourced Al marketplace," IEEE Access, vol. 10, pp. 54325-54335, 2022 (First published Online during April 2022).

doi: https://doi.org/10.1109/ACCESS.2022.3171254.

Satendra Singh and Jaya Sreevalsan-Nair, "Adaptive multiscale feature extraction in a distributed system for semantic classification of airborne LiDAR point clouds," IEEE Geoscience and Remote Sensing Letters, vol. 19, 2022, Article no. 6502305.

doi: http://doi.org/10.1109/LGRS.2021.3099935.

Abhik Jana, Gopalakrishnan Venkatesh, Seid Muhie Yimam and Chris Biemann, "Hypernymy Detection for Low-resource Languages: A Study

for Hindi, Bengali, and Amharic," ACM Transactions on Asian and Low-Resource Language Information Processing, vol. 21, no. 4, July 2022 Article No. 67, pp 1–21. doi: https://doi.org/10.1145/3490389.

Reddy Rani Vangimalla and Jaya Sreevalsan Nair, "Communities and Cliques in Functional Brain network using multiscale consensus approach," IEEE Transactions on Neural Systems and Rehabilitation Engineering, Online July 2022.

doi: https://doi.org/10.1109/TNSRE.2022.3190390.

Shaik Mohammed Waseem and Subir Kumar Roy, "FPGA implementation of Proximal Policy Optimization algorithm for Edge devices with application to Agriculture Technology," Journal of Ambient Intelligence and Humanized Computing, Online July 2022.

doi: https://doi.org/10.1007/s12652-022-04117-z.

Arvind Upreti and V. Sridhar, "The dynamics of task automation and worker adjustment in labor markets: An agent based approach," Advances in Complex Systems, Online July 2022.

doi: https://doi.org/10.1142/S0219525922500059.

Manuel Gonzalo, Juan Federico, Balaji Parthasarathy and Hugo Kantis, "Bangalore's IT entrepreneurial ecosystem: a systemic and evolutionary understanding from Latin America," Revista Brasileira de Inovação (The Brazilian Journal of Innovation RBI), vol. 21, 2022, Article no. e022009.

doi: https://www.scielo.br/j/rbi/a/8qzTgcHgbFs6nyC47YqCQXj/abstract/?format=html&lang=en.

PATENTS PUBLISHED/GRANTED

Kumud Kumar Sinha, Lalit Kumar Pathak, Tushar Vrind, Mohanraja Balasubramaniam and Debabrata Das, "Method and UE for Identifying Optimal Number of Paths Between Rfic and Plurality of Sims," published as US 2022/0038987 A1 on February 03, 2022.

Lalith Kumar, Kundan Tiwari, Debabrata Das and Anikethan Ramakrishna Vijaya Kumar, "Method and Apparatus for Downlink Uplink Collision Handling in Wireless Communication Network," published as EP 4000319 A1 on May 25, 2022.

G N Srinivasa Prasanna, "GANAKA: A Computer operating on Models," published as US 2022/0188241 At on June 16, 2022.

Parthiban Annamalai, Jyotsna Bapat and Debabrata Das, "Resource allocation for cellular networks," published as EP 4017057 A1 on June 23, 2022.

Parthiban Annamalai, Jyotsna Bapat and Debabrata Das, "Resource allocation for cellular networks," published as US 2022/0201699 A1 on June 22, 2022.

BOOK CHAPTERS



R. Srinivasan, Sandeep Lakshmipathy and Pramoth Joseph, "GRAB.in™: Enabling Hyperlocal," Platform Business Models: Frameworks, Concepts and Design Edited by R. Srinivasan, Springer, August 2021, pp. 15-33. doi: https://doi.org/10.1007/978-981-16-2838-2_2.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Arvind Upreti and V. Sridhar, "Artificial intelligence and its effect on employment and skilling," Data-centric

Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 3,

Jaya Sreevalsan-Nair, "Multiscaling," Encyclopedia of Mathematical Geosciences edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, September 2021, 4p.

doi: https://doi.org/10.1007/978-3-030-26050-7_223-1.

pp. 31-55.
doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Jaya Sreevalsan-Nair, "LiDAR," Encyclopedia of Mathematical Geosciences edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, November 2021, 4p.

doi: https://doi.org/10.1007/978-3-030-26050-7_180-1.

V. Sridhar and Janaki Srinivasan, "Data-centric living: An introduction," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 1, pp. 1-15.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Shrisha Rao, "Algorithms in society: Arbitrage, bias, and culture," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 2, pp. 17-30.

Sachit Rao, "Continuing cybernetic musing: Behaviour shaping throughData-driven feedback," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 4, pp. 56-77.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and Regulation/Sridhar/p/book/9780367554170.

Apoorva Bhalla, Amit Prakash and Swati Ganeshan, "Inclusive Digital governance: Reflecting on public value in a food security programme," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 6, pp. 90-110.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Janaki Srinivasan, "The social meaning of mobile money: Navigating digital payments, savings and credit in the Global South," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 7, pp. 111-132.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

V. Sridhar, Jaya Sreevalsan-Nair, Pritesh Rajesh Ghogale and

Reddy Rani Vangimalla, "Sharing and use of non-personal health information: Case of the COVID-19 pandemic," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 8, pp. 133-165. doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

V. Sridhar, Deepti Balaji Raykar and T. K. Srikanth, "Evaluation of privacy policies of digital firms," Datacentric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 9, pp. 169-201.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Deepti Balaji Raykar, V. Sridhar and T. K. Srikanth, "Incorporating privacy regulatory requirements in building software," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 10, pp. 202-222.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

V. Sridhar, Sai Rakshith Potluri and Shrisha Rao, "Data localization and its effects on cross border digital trade," Data-centric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 12, pp. 262-282.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

V. Sridhar and Janaki Srinivasan, "The epilogue," Datacentric Living: Algorithms, Digitization and Regulation Edited by V. Sridhar, Routledge; November 2021, Chapter 14, pp. 302-305.

doi: https://www.routledge.com/Data-centric-Living-Algorithms-Digitization-and-Regulation/Sridhar/p/book/9780367554170.

Jaya Sreevalsan-Nair, "LiDAR," Encyclopedia of Mathematical Geosciences edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, November 2021, 4p..

doi: https://doi.org/10.1007/978-3-030-26050-7 180-1.

Jaya Sreevalsan-Nair, "Multiscaling," Encyclopedia of Mathematical Geosciences edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, November 2021, 4p..

doi: https://doi.org/10.1007/978-3-030-26050-7_223-1.

Shaik Mohammed Waseem and Subir Kumar Roy, "Hardware realization of Reinforcement Learning Algorithms for edge devices," VLSI and Hardware Implementations Using Modern Machine Learning Methods Edited by Sandeep Saini, Kusum Lata, G.R. Sinha, CRC Press, 2022, 22p..

doi: https://doi.org/10.1201/9781003201038.

Jaya Sreevalsan-Nair, "Minimum Entropy Deconvolution," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, December 2021, 3p..

doi: https://doi.org/10.1007/978-3-030-26050-7_206-1.

Jaya Sreevalsan-Nair, "Maximum likelihood," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, December 2021, 3p..

doi: https://doi.org/10.1007/978-3-030-26050-7_198-1.

Jaya Sreevalsan-Nair, "K-Means clustering," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, December 2021, 3p..

doi: https://doi.org/10.1007/978-3-030-26050-7_171-1.

Jaya Sreevalsan-Nair, "K-nearest neighbors," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, December 2021, 3p..

doi: https://doi.org/10.1007/978-3-030-26050-7_170-1.

Jaya Sreevalsan-Nair, "Virtual Globe," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, December 2021, 5p..

doi: https://doi.org/10.1007/978-3-030-26050-7 346-1.

Jaya Sreevalsan-Nair, "Normal distribution," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, May 2022, 4p..

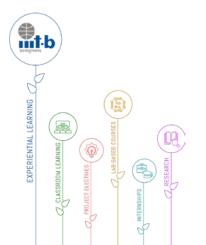
doi: https://doi.org/10.1007/978-3-030-26050-7 228-1.

Jaya Sreevalsan-Nair, "Proximity regression," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series) Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, June 2022, 2p..

doi: https://doi.org/10.1007/978-3-030-26050-7_258-1.

G. R. Sinha, Bidyadhar Subudhi, Chih-Peng Fan and Debabrata Das, "Attaining strong learning outcomes using modern pedagogies in Teaching Image Processing and Computer Vision," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022, Chapter 1, pp. 1-20.

doi: https://doi.org/10.4018/978-1-6684-4210-4.ch003.



Chandrashekar Ramanathan, "Technologies for teaching the Learning Process: Its evaluations and assessments," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022, Chapter 3, pp. 38-55. doi: https://doi.org/10.4018/978-1-6684-4210-4.ch001.

Shaik Mohammed Waseem and Subir Kumar Roy, "Hardware realization of Reinforcement Learning Algorithms for Edge Devices," VLSI and Hardware Implementations Using Modern Machine Learning Methods, Edited by Sandeep Saini, Kusum Lata, G.R. Sinha, CRC Press, 2022, 22p..

doi: https://doi.org/10.1201/9781003201038.

Kapil Kumar Nagwanshi, G. R. Sinha, Bidyadhar Subudhi, Pravinkumar B. Landge and Dhiraj V. Bhise, "An empirical study on the effect of program educational objectives on the Computer Science subject," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022, Chapter 11, pp. 199-224. doi: https://doi.org/10.4018/978-1-6684-4210-4.ch011.

Jaya Sreevalsan-Nair, "Normal Distribution," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, May 2022, 4p.

doi: https://doi.org/10.1007/978-3-030-26050-7 228-1.

Chandramouleeswaran Sankaran, "Innovative Pedagogies in Teaching courses in the field of Electronics and Computer Science," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022, Chapter 12, pp. 225-243.

Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, June 2022, 2p.

"Proximity

Regression,"

Sreevalsan-Nair,

Jaya

doi: https://doi.org/10.1007/978-3-030-26050-7_258-1.

doi: https://doi.org/10.4018/978-1-6684-4210-4.ch012.

G. R. Sinha, Bidyadhar Subudhi, Chih-Peng Fan and Debabrata Das, "Attaining Strong Learning Outcomes Using Modern Pedagogies in Teaching Image Processing and Computer Vision," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022. Chapter 1, pp. 1-20.

G. R. Sinha, Bidyadhar Subudhi and Silvia L. Ullo, "Roadmap to Robust assessment of Student Learning Outcomes," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022, Chapter 13, pp. 244-264. doi: https://doi.org/10.4018/978-1-6684-4210-4.ch013.

doi: https://doi.org/10.4018/978-1-6684-4210-4.ch003.

Chandrashekar Ramanathan, "Technologies for Teaching the Learning Process: Its Evaluations and Assessments," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022. Chapter 3, pp. 38-55. doi: https://doi.org/10.4018/978-1-6684-4210-4.ch001.

Kapil Kumar Nagwanshi, G. R. Sinha, Bidyadhar Subudhi, Pravinkumar B. Landge and Dhiraj V. Bhise, "An Empirical Study on the Effect of Program Educational Objectives on the Computer Science Subject," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022. Chapter 11, pp. 199-224. doi: https://doi.org/10.4018/978-1-6684-4210-4.ch011.

Chandramouleeswaran Sankaran, "Innovative Pedagogies in Teaching Courses in the Field of Electronics and Computer Science," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022. Chapter 12, pp. 225-243.

doi: https://doi.org/10.4018/978-1-6684-4210-4.ch012.

G. R. Sinha, Bidyadhar Subudhi and Silvia L. Ullo, "Roadmap to Robust Assessment of Student Learning Outcomes," Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes, Edited by Bidyadhar Subudhi and G.R. Sinha, IGI Global, June 2022. Chapter 13, pp. 244-264.

doi: https://doi.org/10.4018/978-1-6684-4210-4.ch013.

G. R. Sinha, "Environmental Sensors," Reference Module in Biomedical Sciences, Edited by Michael Caplan, June 2022.

doi: https://doi.org/10.1016/B978-0-12-822548-6.00129-1.

Jaya Sreevalsan-Nair, "Laplace Transforms," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 3p.

doi: https://doi.org/10.1007/978-3-030-26050-7_175-1.

Jaya Sreevalsan-Nair, "Simulated Annealing," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 3p.

doi: https://doi.org/10.1007/978-3-030-26050-7_291-1.

Jaya Sreevalsan-Nair, "K-Medoids," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 3p.

doi: https://doi.org/10.1007/978-3-030-26050-7_172-1.

Jaya Sreevalsan-Nair, "Expectation-Maximization Algorithm," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 4p.

doi: https://doi.org/10.1007/978-3-030-26050-7_103-1.

Jaya Sreevalsan-Nair, "Fuzzy C-Means Clustering," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 3p.

doi: https://doi.org/10.1007/978-3-030-26050-7_129-1.

Jaya Sreevalsan-Nair, "Independent component analysis," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 3p.

doi: https://doi.org/10.1007/978-3-030-26050-7_158-1.

Uttam Kumar, "Patterns," Encyclopedia of Mathematical Geosciences, (Encyclopedia of Earth Sciences Series), Edited by B.S. Daya Sagar, Qiuming Cheng, Jennifer McKinley, Frits Agterberg, Springer, July 2022, 5p.

doi: https://doi.org/10.1007/978-3-030-26050-7_245-1.

EDITED BOOKS



V. Sridhar Ed., Data-centric Living: Algorithms, Digitization and Regulation. India: Routledge, 2021, xxii, 320p.

doi: https://doi.org/10.4324/9781003093442.

Bidyadhar Subudhi and G.R. Sinha Eds., Development of Employability Skills through Pragmatic Assessment of Student Learning Outcomes. USA, IGI Global, 2022, 296p.

doi: https://doi.org/10.4018/978-1-6684-4210-4.

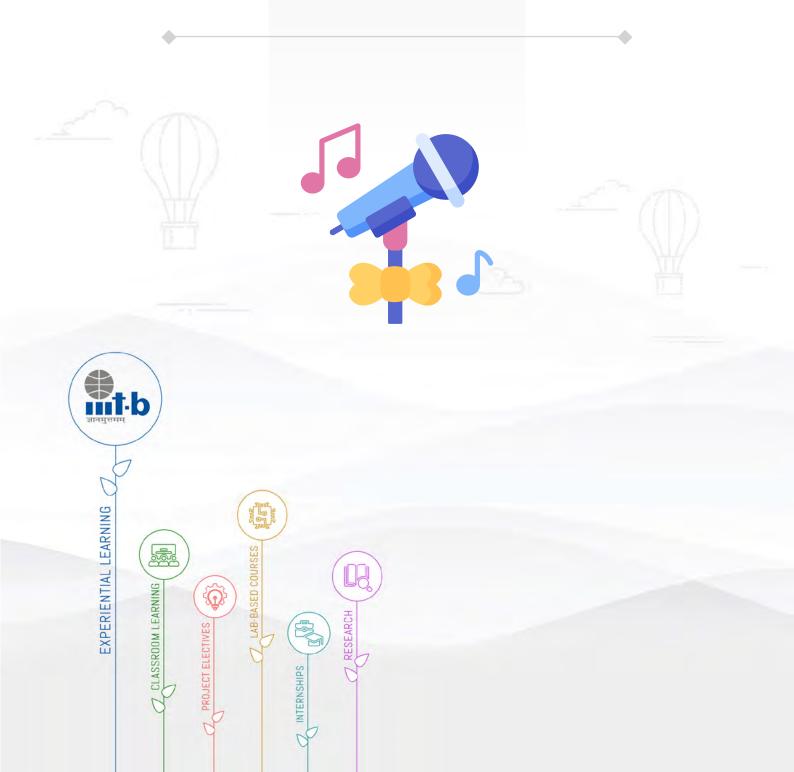
Sandeep Saini, Kusum Lata, Abhishek Sharma and G R Sinha. Eds. Advances in Image and Data Processing using VLSI Design. vol. 2: Biomedical applications. Bristol; UK, IOP Science, 2022, 230p. doi: https://doir.org/10.1088/978-0-7503-3923-0.







16 STUDENT ACTIVITIES

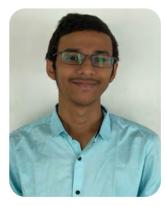


STUDENT AFFAIRS COUNCIL

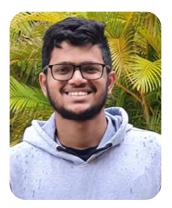




Suchi MT2021140



Prasanth IMT2020522



Jayanth A IMT2019038



Pakhi Gauba DT2021014



Krishan Gopal



Harsh Shah MT2021050



Vishnutha Sheela



Divyanshi Rajput

STUDENT ACTIVITIES



August 29, 2021

Photography Contest

Photography is a powerful medium of expression that can be used to communicate strong positive messages about a subject. The Photography club of IIITB conducted a mirror photography contest with the theme on 'Perspective'. A few alumni of IIITB were the judges of the competition and the winners of the event are Shashank Shekhar, Heet Vasanj and Anjan Vikas.



October 16, 2021

Garba Night

The Navaratri festival is to pay respect and devotion to all nine forms of mother goddess Navaratri is incomplete without Garba which is a high-energy dance form that is usually enjoyed during the Navratri festivities. The performance of Garba has spread beyond Gujarat and enjoyed in various parts of India. At IIITB campus SAC 2021 organised Garba Night where students thoroughly enjoyed dancing to the Garba music and beats. There was also a

special dinner arranged for the students by the Food Committee.









October 24, 2021

Glass Painting Event

The Art Club of IIIT Bangalore conducted a Glass Painting event for all the interested students. The event was not restricted to any specific themes. The Club provided all the required materials such as acrylic paint boxes, brushes to all the participants.





October 30, 2021

Inkctober

The Art Club of IIIT Bangalore organized a competition for students, 'Inktober' as a part of Halloween. This competition allowed students to come up with their imagination and be creative. It was all about creating spooky artwork using only ink.





November 4, 2021

Aikyam celebrated Diwali with Housekeeping Staff

Aikyam of IIIT Bangalore celebrated Diwali with security, housekeeping and canteen staff and their family members. Entertaining events such as dance, music along with fun games (balloon piercing and musical chair) were organized. They were given bountiful goodies and sweet boxes. The kids were more excited to receive chocolates, drawing set and crackers. Aikyam also organized Tambola event for students.



November 8, 2021

Dance Workshop by Impulse

Diwali was celebrated in different ways at the campus. A bit of learning was also added to the celebrations. Impulse, the Dance Club of IIIT Bangalore organized a dance workshop on November 8. The members of the Club picked an easy choreography to teach the students. Around 55 participants attended the event.



November 14, 2021

Children's Day

Fostering a sense of belongingness is a gratifying feeling for us all. Aikyam club of IIIT Bangalore marked Children's Day by visiting children of Surabhi Orphanage in Electronic City. The members of Aikyam along with student volunteers spent time with kids engaging them in fun games. The Sports Committee too joined hands in this initiative-donating a bunch of sports equipment including badminton rackets, volleyballs, cricket kits, carrom boards, Board Games-Chess, Ludo.









IIITB Annual Report 2021-22

January 10-17, 2022

Memathon-a Meme Battle

The Branding Committee of IIIT Bangalore organized a meme competition named, Memathon-a Meme Battle from January 10-17. In this competition, 23 students participated and created funny memes. First prize was won by Thakur Devendrasingh Premsingh (MT2021146), second prize was won by Sagar Shahu Shirke (MT2021112) and third prize was bagged by Chakradar Reddy (IMT2018018). All the winners were awarded with custom-designed merchandise of our college.

February 26, 2022

Canvas Painting Event

The Art Club of IIIT Bangalore held a two-hour Canvas Painting event as a recreational activity.



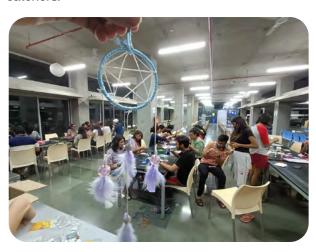


June 17, 2022

Dream Catcher Making Event

It is believed that hanging dream catchers in your room catch all the negative energies and gives away the positive ones. The feathers help in sending positive energies throughout your home. The motive and symbolism to hang the dream catcher remain the same – to attract good vibes. The Art Club of IIIT Bangalore was in a mood to catch the positive vibes and organised a small two-hour event and encouraged students to make their own such dream catchers. Around 30 students participated in the

event and they were provided with dream catcher making kits and other art material to create dream catchers.



June 26, 2022

Bidding Goodbye to Graduating Students

A farewell by juniors is an expression of good wishes to graduating students who are leaving the institution to pursue their dream careers. A farewell was organised by IIIT Bangalore's junior students in a bid to say goodbye and good luck to the graduating students. They entertained their seniors by organising a music performance by well-known musician, Raj Thakur. On a lighter note, based on a live voting they selected a few seniors as Mr. Farewell, Miss. Farewell, Munna Circuit award for best friends, Maa Ka Ladla Bigad Gya award, Mr. Studious and Miss. Studious award. A dance performance by the Dance Club of the institute was also held. The event concluded with a delicious dinner as well.





STUDENT ACHIEVEMENTS



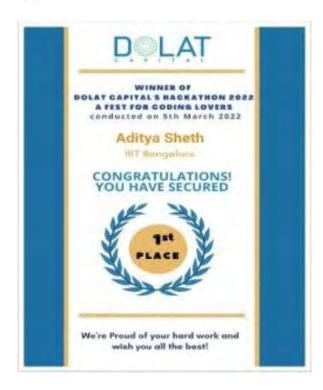
Nidhish Bhimrajka (IMT2019059) and Daksh Agarwal (IMT2019505) were selected among the top 4 teams from India to pursue a 6-month research internship in the Domain Name System (DNS). The DNS Research Competition (https://haryana.coe-iot.com/dns/) was conducted by ICANN and NASSCOM Centre of Excellence IoT & AI.

Divyam Agrawal (IMT2019028), Gagan Agarwal (IMT2019031) and G Sri Harsha (IMT2019030) won the first place (\$2,500) in DeFi Blockchain hackathon hosted by the Finance Club of IIT Bombay. The blockchain hackathon required the development of a DeFi project capable of handling invoice management for onchain transactions.

Aditya Sheth (IMT2018003) and Gururaj Mujumdar (MT2021049) won the NetApp Academia Hackathon with a cash prize of ₹1 Lakh each. This challenging hackathon tested skills in Data Structures and Algorithms which needed to be solved under two hours.

Shivangi Garg (DT2020020) was named as 'Mumkin Changemaker Fellow' and received ₹10,000 fellowship grant to support her work in enabling conversations around dating and sexuality for the LGBTQTIA+ community. Her submission to the Mumkin fellowship call was in continuation of a course project conducted was a part of the Advanced Human-Computer Interaction course (taught by Prof Preeti Mudliar) at IIIT Bangalore.

Aditya Sheth (IMT2018003) won 1st place in Dolat Capital's Hackathon 2022 with a cash prize of INR 10,000/-. It was conducted on codechef programming platform and it was open to all in India. The Hackathon was held at reputed colleges across seven states in India.



iMTech students Vijay Jaisankar, Vignesh Bondugula, and Siva Jagadesh M mentored by Ph. D. research scholar Jayati Deshmukh and Prof Srinath Srinivasa, won an award for the best presentation based on live audience voting, in the SUMO User Conference (Simulation of Urban Mobility) on May 11, 2022.

They presented their work on simulating traffic flows in Electronics City Phase 1, along with several intervention measures like placing speed cameras, adaptive traffic lights, and estimating congestion at different intersections.

iM.Tech. students, Gayathri Venkatesh, Arpitha Malavalli, and Nikitha A N have been awarded a scholarship under the URAM Scholarship program by Micron. URAM Scholarship program is for Women Student Engineers pursuing pre-final year B.Tech/ Dual degree courses in EEE/CSE/ECE.

iMTech student Nikhil Agarwal and his team members (Rhea Rajesh, Strate School of Design, Anushka Vijaywargi, IICD, Samruddhi Godbole, SMI, Shruti Kumar, LISAA) were selected out of 7 teams in AI in Fashion and Design Hackathon, which was organised by the French Institute in India & Consulate General of France in Bangalore and held on April 2nd & 3rd at IIIT Bangalore. He and his team members presented a solution to help build a market intelligence platform for artisans, so that the artisans can leverage technology and get intelligence on trends, industry forecasts etc. Nikhil Agarwal with his team members won a trip attend a summer school in Aivancity, Paris- Cachan.

Our Ph.D. Scholar Anindita Dasgupta and Prof Uttam Kumar, IIITB received the "Best Paper Award" at the "Virtual Symposium on Applications of Machine Learning and Data Science in Inter-disciplinary areas" held between 29th-30th, May 2022, at the Indian Institute of Management Visakhapatnam. The paper title was "Impact of Increased Urbanisation on Land Surface Temperature: A Case Study of Bangalore"

V P Abhida was selected for the best student presentation award in the 17th International Computer Science Symposium in Russia which was held during June 29–July 1, 2022. She authored and presented the paper titled "Coloring a Dominating Set without Conflicts: q-subset Square Coloring".Pradeesha Ashok, Avi Tomar, Dolly Yadav were the co-authors.

PhD Student Apurva Kulkarni's (PH2018020) write-up was chosen for an award under the category of "Best

stories" at AWSAR Awards competition conducted by DST, Govt of India. Augmenting Writing Skills for Articulating Research (AWSAR) is an initiative of DST, Government of India that aims to disseminate Indian research stories among the masses in an easy to understand and interesting format to a common man.

A group of students from IIIT Bangalore received the Best Student Showcase Award in Software Product Management Summit 2022 hosted by IIMB and ISPMA. The team did an in-depth analysis of VideoKen's Al player based on concepts taught by Prof Haragopal Mangipudi in the SPM course. The team worked closely with VideoKen and made business recommendations for the product, which was presented in the SPM Summit.

The awarded students were:

- Gayathri Venkatesh IMT2018026
- Manasa Kashyap IMT2018040
- Abhigna IMT2018002
- Mundla Aarthi IMT2018046

Nikhil Agarwal (IMT2019060) received first prize for Moralis sponsored track in Hackathon "Road to web3" held from February 3-9, 2022. This event was organized by ETHglobal. He won a prize money of \$2300.

Dhruv Sharma (IMT2019017) won 1st place in Praxis Data Science Students Championship 2022. He not only provided a realistic and sustainable solution to the "Rent Predictor" challenge but also walked out with a cash prize of ₹25,000 as well as the winner's certificate. Among the other institutions that represented in the finals were Indian Institute of Technology (IIT), Madras, IIT Kottayam, Great Lakes Institute of Management, Chennai and AKNU College of Engineering from Rajahmundry in Andhra Pradesh.

STUDENT ADMISSIONS (2021-22)



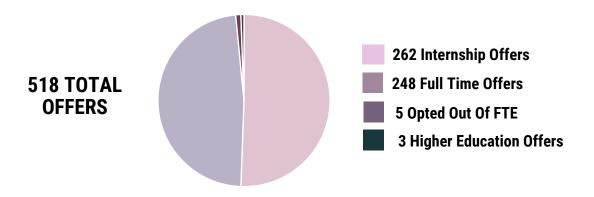
MTech		151
177	F 🙎 🙎 1	26
iMTech	м 🗶 🗶 🗶 🗶 🗶 🗶 🗶 🗶	98
103	F 1	5
MS	м 🙎 🕽	13
19	F 🙎	6
MScDT	м	7
16	F 🙎	9
Ph.D	м 🛂	4
12	F 🙎	8

Total Students: 327

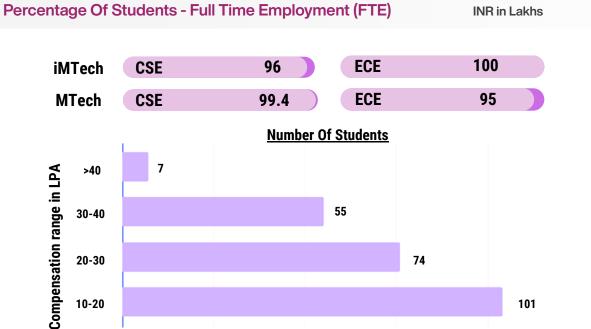


PLACEMENT STATISTICS





OFFER	METRIC	<u>iMTech</u>		<u>MTech</u>	
		<u>CSE</u>	<u>ECE</u>	<u>CSE</u>	<u>ECE</u>
ull Time CTC INR In Lakhs)	Highest	84*	34	78	40.88
	Average	24.8	23.5	24.5	23.66
Internship Stipend (INR In Thousands)	Highest	165	85	100	50
	Average	53.11	45	61	41.5



*2.02 cr international offer not included

Top Recruiters























































Higher Studies / RA Offers Received







































M.Sc. Digital Society

15 Internship Offers

Highest Stipend - ₹73K (International) Average Stipend - ₹ 28.5K

7 FTE Offers

Highest CTC-16.5 LPA Average CTC- 9.4 LPA















FULL TIME RECRUITMENTS

Company Name	Students Recruited	Company Name	Students Recruited
Qualcomm	38	Adobe	2
Walmart Labs	23	Amagi Media Labs	2
Mathworks	17	Amazon (SDE 1)	2
PayU	13	Analog Devices	2
Oracle	11	Cambium Networks	2
Cisco	9	CSG	2
Micron	9	DE Shaw	2
Axtria	8	Google	2
Pegasystems	8	ISRO	2
Zoom Video Communications	8	Rippling	2
Morgan Stanley	7	Rupeek	2
Reliance Jio	6	Salesforce	2
Samsung Semiconductor	6	Samsung Research	2
IBM	5	SAP Labs	2
Mobisy	5	VM Ware	2
Western Digital	5	Asocs Cloud	1
Bosch	4	Cyware Labs	1
BYJU'S	4	Databricks	1
Caterpillar	4	GE Digital	1
Cropin	4	Goldman Sachs	1
Intel	4	Havell's	1
NetApp	4	Hiver	1
Perfios	4	nuture.farms	1
Siemens Healthineers	4	Nvidia	1
Slice	4	Synopsys	1
American Express	3	Technoforte	1
Dataweave	3	Texas Instruments	1
DP World	3	Tyfone	1
Flipkart	3	Udaan	1
Infosys	3	Z1 Media	1
Mediatek	3	Zee Entertainment (SDE)	1
Pluribus Networks	3	ZS Associates	1
Trukker	3		

INTERNSHIP RECRUITMENTS

Company Name	Students Recruited
Qualcomm	31
Walmart Labs	26
Mathworks	16
Cisco	14
IBM	12
Morgan Stanley	9
Samsung Semiconductor	9
Intel	8
Dataweave	8
Micron	8
Pegasystems	7
Hewlett Packard	7
Western Digital	5
PayU (Software Engineer)	5
Zoom Video Communications	5
Mobisy	4
Flipkart	4
Caterpillar	4
Slice	4
Analog Devices	3
Salesforce	3
Pluribus Networks	3
Bosch	3
Nvidia	3
American Express	3
GE Digital	3
Siemens Healthineers	3
Axtria	3
Infosys	3
Rippling	2
SAP Labs	2
Udaan	2
VM Ware	2

Company Name	Students Recruited
Perfios (Applied Scientist)	2
Mediatek	2
Siemens (Embedded)	2
Perfios (SDE)	2
Amazon SDE	2
Betterhalf.ai	2
Scienaptic	2
Amazon Web Services	2
Addled	2
Vikasietum	2
Hiver	1
NetApp	1
MIQ Digital	1
Cyware Labs	1
BYJU'S	1
Rubrik	1
Presto Apps	1
Glimpay	1
Botzee	1
Global Foundaries	1
IQVIA	1
Siemens Mentor Graphics	1
Digital Society School (Amsterdam)	1
MOSIP	1
ISRO	1
Adfactors PR	1
SunSource Energy	1
Bitronics	1
Avench Systems	1
Kadamba Intrac Pvt Ltd	1
Mphasis Project	1
Vision Empower	1



17 WE MISS YOU



IN FOND REMEMBRANCE





Mr. Shivankit Bhardwaj passed away on October 18, 2021



IIIT Bangalore was bereaved by the sudden death of Mr. Shivankit Bhardwaj (MT2018521), an Alumnus on October 18, 2021. The students, faculty and staff members condoled the death of Mr. Shivankit. The faculty and junior students remembered him as a bright, friendly and helpful personality. He was well known for his stage performances, delivering speeches and poetry.



Ms. Vijayaxmi A passed away on May 3, 2022



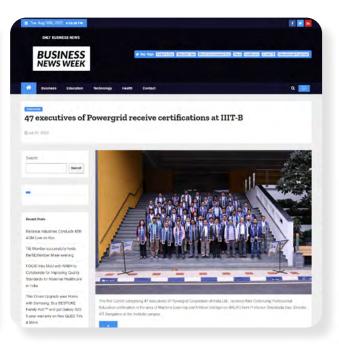
On May 3, 2022, Ms. Vijayalaxmi A (PH2021008) left for her heavenly abode due to an illness. She had enrolled in a Ph.D programme in Networking, Communications & Signal Processing (NCPS).



18 IIITB IN THE NEWS











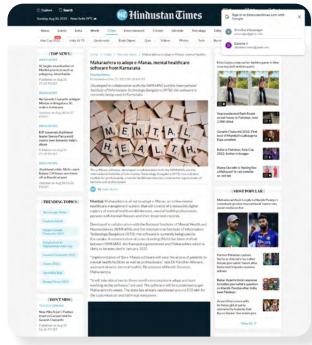
























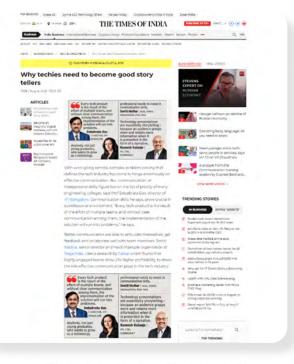








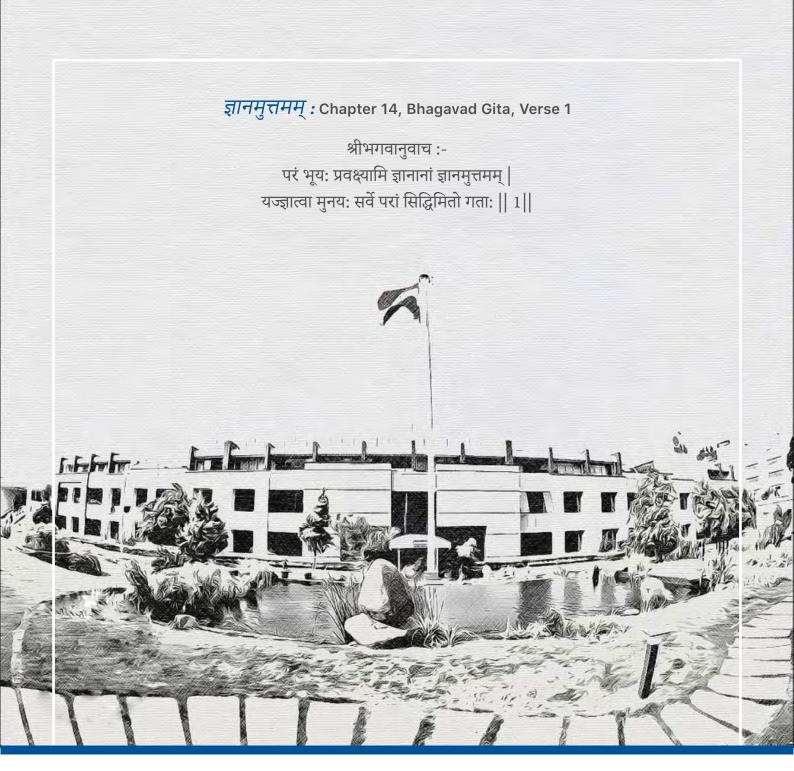














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