MR. RAMESH NAIDU LAVETI

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Mr. Ramesh, Currently working as Scientist-F – Artificial Intelligence @ C-DAC Bangalore, has more than 19-years of experience in AI, Big Data Analytics and Scientific Computing. Actively involved in initiating and executing projects in various domains such as Secure AI, AI for Cybersecurity, GenAI, Computational Neuropathology, AI for Mental Health & Psychiatry, Math Kernels and Parallel computing solutions for weather domain. Lately, his focus has been on AI forensics, trustworthy AI, and resource constrained AI. He is an inquisitive and enthusiastic data professional who enjoys using algorithms to uncover insights and enjoys the data throughout its lifecycle.

Education:

Sl.	Degree	Specialization	College/University
1	PhD	Artificial Intelligence/Data Science	International Institute of Information Technology, Bangalore (IIT-B) 2022 – Present
2	MS by Research	Data Science	International Institute of Information Technology, Bangalore (IIT-B) 2018 - 2021
3	B. Tech	Computer Science & Engineering	Archarya Nagarjuna University, Vijayawada (ANU)

Select Set of Projects:

S. No.	Name of the Project
1.	Advanced Computing Research
2.	National Super Computing Mission (NAM) – AI for Cybersecurity – Dynamic

	Adversarial Robustness Analysis Framework for AI Applications
3.	Comprehensive Robustness & Reliability Assessment Toolbox for AI applications
4.	Advanced Cyber Forensics Toolbox with AI and Analytics
5.	A National Level Taskforce Project – "Pathways to Resilience and Mental Health (PARAM)
6.	Procurement Automation Tool using GenAI
7.	Methodology, Architecture and Data Science Framework for fraud detection in ATM transactions for Indian banks
8.	Enhanced Decryption Tool
9.	Spectral Math Kernels for Weather and Climate Forecasting Models with Variable Resolution Grid
10.	National Monsoon Mission – Portable Climate Forecast System (CFS)
11.	Generic Problem Solving Environment (PSE) for Seasonal Forecast Model (SFM)
12.	GARUDA – Implementation of Seasonal Forecasting Model (SFM) on Grid Infrastructure
13.	Seasonal Prediction of Indian Monsoon (SPIM)

Publications:

- R. N. Laveti, J. Sreevalsan-Nair, and T. Srikanth, "EAMF: An Entropy-enhanced Attention-based Ensemble Metric Few-Shot Learning for MRI Image Classification," in Proceedings of the 2025 47th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) (accepted), IEEE, 2025.
- Vivek, Yelleti, Vadlamani Ravi, Abhay Anand Mane, and Laveti Ramesh Naidu., Explainable One-Class Classification for ATM Fraud Detection, In 2024 57th International Conference on Emerging Trends in Business Analytics & Management Sciences (BAMS-ORSI-2024).
- Vivek, Yelleti, Vadlamani Ravi, Abhay Anand Mane, and Laveti Ramesh Naidu., Explainable Artificial Intelligence and Causal Inference based ATM Fraud Detection, IEEE CIFEr 2024.
- Laveti, R. N., Mane, A. A., & Pal, S. N. (2021, April). Dynamic Stacked Ensemble with Entropy based Undersampling for the Detection of Fraudulent Transactions. In 2021 6th International Conference for Convergence in Technology (I2CT) (pp. 1-7). IEEE.
- Vivek, Yelleti, Vadlamani Ravi, Abhay Anand Mane, and Laveti Ramesh Naidu. "ATM Fraud Detection using Streaming Data Analytics." arXiv preprint arXiv:2303.04946 (2023).
- Khochare, J., Rathod, J., Joshi, C., & Laveti, R. N. (2020, November). A Short-term Wind Forecasting Framework using Ensemble Learning for Indian Weather Stations. In 2020 IEEE International Conference for Innovation in Technology (INOCON) (pp. 1-7). IEEE.
- Renault Job Fernandes, Ramesh Naidu Laveti, Janaki ch and Sujatha AK, "A Deep Learning approach for Seizure Prediction from EEG data", ICSAS 2018, Bangalore.
- Ramesh Naidu Laveti et al., "Implementation of Learning Analytics Framework for MOOCs using State-of-the-art In-Memory Computing", ELELTECH, 4th-5th August, 2017, Hyderabad.

- Ramesh Naidu Laveti, Janaki Ch, Supriya N Pal, N. Sarat Chandra Babu, "A Hybrid Recommender System using Weighted Ensemble Similarity Metrics and Digital Filters", Hyderabad, HiPC-2016.
- Ramesh Naidu Laveti, “Automatic dynamic stack management in large scientific applications – A global spectral model as a case study”, International Symposium for Grids and Clouds (ISGC-2016), Taipei, March 2016.
- Ramesh Naidu Laveti, Pavan Kumar, Janaki CH, Supriya N Pal, "Analysis of Variants in Rice Genomes using Apache Spark's Machine learning library", ICRISAT's 70th Annual "International conference on Statistics and Big Data Bioinformatics in Agricultural Research", November, 2016.
- Ramesh Naidu Laveti, Arunachalam B, Prahladarao B. B., "Seasonal Ensemble Forecasting Application on SuMegha Scientific Cloud Infrastructure", International Symposium for Grids and Clouds (ISGC-2016), Taipei, March 2016.
- Ramesh Naidu Laveti, “Seasonal Forecast Modeling application on the GARUDA Grid infrastructure” “PARCOMPTECH-2013”, 22nd-23rd February 2013, Bangalore.
- Deepanshu S, Aman A, Ramesh Naidu Laveti, Arunachalam B, Vineeth Simon Arackal, Prahlada Rao B B, “Problem Solving Environment for Seasonal Forecast Model on CDAC Scientific Cloud”, 2nd International Conference on Advances in Cloud Computing (ACC 2013), September 2013, Bangalore.
- Ramesh Naidu Laveti, Janakairaman S, Mohit Ved and B.B. Prahlada Rao, “Seasonal Forecast Modeling application on the GARUDA Grid Infrastructure", Proceedings of International Symposium for Grids and Clouds (ISGC-2012, Academia Sinica, Taipei, 26th Feb - 2nd March, 2012) - Proceedings of Science - PoS(ISGC 2012)010.
- S. Janakiraman, Mohit Ved, Ramesh Naidu Laveti, Priyanaka Yadav and SulochanaGadgil, “Prediction of the Indian summer monsoon rainfall by a state-of-the-art coupled model”, CURRENT SCIENCE, VOL. 100, NO. 3, 10 FEBRUARY 2011.
- Mohit Ved, S Janakiraman, Ramesh Naidu Laveti, B BPrahladarao, “Seasonal forecasting of Indian summer monsoon by NCEP GFS atmosphere model”, published in Bulletin of Indian Meteorological society, Special issue – Proceedings of TROPMET 2011, vol. 37, No.1-4, pp. 3-10.
- Ramesh Naidu Laveti, Janakiraman S, Mohit Ved and Dr. B. B. Prahaladarao, “Digital filters in climate models”, “System Modeling, Optimization and Advanced Process Automation (SYMOPA-2010)”, an international conference at Thiruvananthapuram, 16th - 19th December 2010.
