

Call for Senior Research Associates

Project Title: Privacy Preserving Data Processing and Exchange for Sensitive Data

Institution: International Institute of Information Technology Bangalore (IIIT-B)

Location: Bangalore, India

Contract Duration: 1 Year (Fixed-Term, Extendable up to 3 Years Based on Project Requirements and Performance)

Application Deadline: Rolling call, until positions are filled

Overview:

We invite applications for Senior Research Associate positions to join an impactful research project on Privacy Preserving Data Processing and Exchange for Sensitive Data. This initiative focuses on developing robust frameworks for secure data handling while addressing critical consent management issues. The project seeks to enhance privacy, data protection, and user autonomy in digital ecosystems, particularly within Digital Public Infrastructure (DPI). As a Senior Research Associate, you will contribute to innovative solutions that balance technological scalability with ethical data practices.

Key Responsibilities:

- Lead research efforts on consent management mechanisms integrated with privacy-preserving data processing and exchange protocols.
- Design, develop, and deploy scalable web applications or platforms to prototype and test consent-driven data workflows.
- Investigate and analyze DPI-related challenges, including consent frameworks, data protection regulations, and privacy-by-design principles.
- Collaborate with cross-functional teams to evaluate system performance, security, and compliance.
- Author high-quality publications, technical reports, and policy briefs based on project outcomes.
- Mentor junior researchers and contribute to project dissemination through workshops and conferences.

Eligibility Criteria:

- Master's or Ph.D. in Computer Science, Information Technology, Data Science, or a related field, with at least 3-5 years of post-qualification research or industry experience.
- Proven hands-on experience in building scalable web applications (e.g., expertise in cloud-native architectures, microservices, frameworks like React/Node.js/Django, and deployment on AWS/Azure).
- In-depth knowledge of DPI ecosystems, consent management, data protection laws (e.g., GDPR, India's DPDP Act), and privacy technologies.
- Strong track record in research or development projects involving sensitive data handling.
- Excellent problem-solving, communication, and project management skills.
- Ability to work independently and in multidisciplinary teams.

Desirable Skills:

- Experience with privacy-enhancing technologies such as homomorphic encryption, federated learning, or zero-knowledge proofs.
- Familiarity with consent management tools (e.g., Open Consent, Solid Pods) and secure data exchange standards (e.g., FHIR, Verifiable Credentials).
- Prior work on India's DPI stack (e.g., Aadhaar, CoWIN) or international equivalents.
- Proficiency in data governance, ethical AI, or regulatory compliance auditing.

Application Process:

Interested candidates should submit the following documents to [sri@iiitb.ac.in (mailto:sri@iiitb.ac.in)]:

1. A cover letter detailing your relevant experience, technical expertise, and vision for contributing to consent management in privacy-preserving data systems (max. 2 pages).
2. Updated CV highlighting academic/industry background, key projects, and technical skills.
3. Two samples of prior work (e.g., publications, code repositories, or project reports).
4. Contact details of three professional referees.

Shortlisted candidates will be notified for virtual or in-person interviews.

Contact:

For inquiries, email [sri@iiitb.ac.in (mailto:sri@iiitb.ac.in)] or visit the Web Science Lab website.

About IIIT Bangalore and Web Science Lab:

The International Institute of Information Technology Bangalore (IIIT-B) is a premier research-driven institution renowned for its interdisciplinary programs and cutting-edge contributions to technology and society. The Web Science Lab (WSL) at IIIT-B, part of the global Web Science Trust Network (WSTNet), focuses on understanding the transformative impact of the Internet, World Wide Web, and AI on human life across domains like business, governance, and social well-being. WSL's research spans semantic web, network science, privacy, and consent, with projects addressing real-world challenges in Digital Public Infrastructure (DPI). We invite passionate Senior Research Associates to join WSL and drive forward-thinking research on privacy-preserving data processing, contributing to ethical, secure, and inclusive digital ecosystems.

We are committed to fostering diversity and encourage applications from underrepresented groups. The institution reserves the right to modify or cancel the call as needed.