The Software & Application Innovation Lab (SAIL) at the Hariri Institute for Computing is a professional research, software engineering, and consulting lab that acts as both a driver and a collaborative partner for computational and data-oriented research efforts across Boston University.

JOIN OUR TEAM

SAIL consists of a team of full-time software engineers, project managers, and interns who work directly with faculty members across disciplines and at all stages of the research pipeline. We are currently accepting applications for full-time positions and paid internship opportunities. Interested in building production-quality software and doing cutting-edge research within a university startup setting? Check out our openings!

Full-Time Opportunities
Software Engineer, Full-Stack
Software Engineer, Security & Privacy

Summer 2019 Internships
Software Engineer Intern
User Experience Design Intern

TO APPLY AND LEARN MORE, VISIT OUR WEBSITE: HTTPS://SAIL.BU.EDU/
CONTACT HICSAIL@BU.EDU FOR ADDITIONAL INFORMATION

Impactful Projects
Contribute to meaningful projects in diverse fields including: data science, security and privacy, computational biology, digital health, and more.

Interdisciplinary Collaborations
Work with faculty, researchers, and partners across multiple disciplines within industry, academia, and government.

Diverse Technologies
Learn and experiment with industry-standard tools and technologies, including full-stack frameworks, development environments, and CI/CD.

Professional Development
Take free classes, attend lectures, and participate in reading groups to continue to grow your knowledge in specific areas of interest.
FULL-TIME OPPORTUNITIES

All team members at SAIL are engaged in identifying efforts and shaping the long-term vision of our research agenda. In addition to working with other professional software engineers, you have the opportunity to collaborate with researchers at Boston University and beyond who are nationally respected as leaders in their corresponding areas of research. Additionally, you can develop new skills in almost every project, tackle diverse challenges in a flexible work environment, and mentor software engineer interns.

Software Engineer, Full-Stack

Work within an agile team defining and building prototypes and production-quality open source libraries, applications, systems, and databases in domains such as digital health, data science, synthetic biology, biomedical engineering, neuroscience, and others.

Project Examples

- Contribute to the design and development of the team’s open-source framework Anchor, a customizable user management and backend system used across many of the lab’s projects.
- Assist in the development and deployment of a smoking cessation mobile application as part of a research study for at least 500 participants.
- Support the development of a RESTful API for a fitness improvement and tracking tool to increase physical activity levels in people with knee osteoarthritis.
- Join a team to enhance HIPAA-compliant backend services for administering computerized adaptive testing (CAT) platforms for a diverse user population, including survivors of burn injuries, pediatric patients, and sign language users.
- Primary technologies for the above projects include: JavaScript, Ionic, MongoDB, and Node.js.

Software Engineer, Security & Privacy

Work within an agile team building prototypes and production-quality open source libraries, applications, and systems that provide stronger security benefits in domains such as trustworthy distributed computing and secure multi-party computation, software-defined networking/clouds, and systems security at the OS, firmware, and hardware layers. Opportunities for full-stack development work outside of these domains will also be available.

Project Examples

- Enhance our application for computing statistical analytics on the collective datasets of over 100 companies without revealing the data of individual participants in support of an ongoing salary equity study in the Greater Boston Area.
- Assist in our privacy-preserving route recommendation service for Honda Research institutes.
- Contribute to the development of our open-source library (JIFF) for accessible and scalable secure multi-party applications.
- Deploy secure multi-party computation functionalities on a distributed open cloud to compute statistics over medical data.
- Visit our research website to view ongoing efforts and publications: https://multiparty.org/.

Minimum Requirements

- BA/BS degree in Computer Science or related technical field. (In lieu of degree, four or more years of relevant experience.)
- One to three years of academic or professional experience.
- Significant experience with contemporary programming languages.
- Experience with modern relational database technologies, NoSQL, and MapReduce/Hadoop.
- Exposure to APIs and other web services within integrated applications.
- Hands on experience with cloud services.
- Knowledge of Linux/Unix systems.
- Exceptional ability and motivation to learn fast and solve problems.
- A passion to impact science and society, and strong desire to work independently in a fast-paced dynamic environment.

APPLY AT: HTTPS://SAIL.BU.EDU/JOIN