Hyeyoung Shin

Resumé

Contact Information

91 Camino Bosque
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Professional Identification

Intermediate-level Research and Development Engineer passionate about solving complex problems with logic and data-driven solutions.

Education

Master of Science in Computer Science Northeastern University 2019
Project: Secure Compilation Advisor: Amal Ahmed

Bachelor of Arts in English Language and Literature Kyeongpook National University 2009

Professional Experience

Library Engineer RelationalAI 2022–2024
Developed an advanced graph analytics library, transforming raw data into actionable insights and enabling data-driven decision-making.

Research and Development Programming Research Laboratory, Czech Technical University 2019–2021
Contributed to an open-source, data-driven fuzzing tool for R, enhancing software reliability and security.

Teaching Assistant Czech Technical University Fall 2020
Educated international students in Object-Oriented Programming (OOP) design using Scala.

Research Assistant Programming Research Laboratory, Northeastern University Fall 2018
Worked on secure compilation projects, focusing on enhancing the safety and security of software systems through innovative compilation verification techniques.

Teaching Assistant Iowa State University Fall 2015
Led weekly recitations for a Java data structures course, providing hands-on learning and support to students.

Publications and Projects

- **Graph Analytics Library**: Played a key role in developing a comprehensive graph analytics toolkit at RelationalAI, enhancing decision-making capabilities through advanced data analysis.
- **Data-Driven Fuzzing Tool for R**: Developed at the Programming Research Laboratory, Czech Technical University, improving the robustness of R applications and contributing to the open-source community.
- **Secure Compilation Research**: Participated in a project aimed at enhancing software security through advanced compilation verification techniques, with an abstract submitted to a student research competition at Principles of Programming Languages 2019.

Technical Skills

Programming Languages: R, Scala, Java, Python

DevOps: Docker, AWS, Azure

Tools & Platforms: Git, Github, Gitlab, JIRA, Emacs, Visual Studio Code

Testing: Unit Testing, Itegration Testing, CI/CD

Honors

Northeastern University Graduate Fellowship	2018
Programming Languages Mentoring Workshop Scolarship	2016, 2017
Oregon Programming Languages Summer Schools fellowship	2016, 2017