Anjali Pal

Contact Information

anjalip@cs.washington.edu

https://github.com/ajpal

Education

University of Washington Seattle, WA — Sept. 2022 - Present
Ph. D. in Computer Science

Brown University Providence, RI — Sept. 2013 - May 2017
Sc. B. in Computer Science

Publications

Equality Saturation Theory Exploration à la Carte — OOPSLA 2023
Anjali Pal, Brett Saiki, Ryan Tjoa, Cynthia Richey, Amy Zhu, Oliver Flatt, Max Willsey, Zach Tatlock, Chandrakana Nandi.

Research Experience

University of Washington — Feb. 2022 - Present
Advisor: Zach Tatlock

Member of the `eggcc` team, developing an equality-saturation based compiler.

Developed Enumo, a domain-specific language for programmable theory exploration. Enumo programs easily replicate results from prior rule inference tools. Enumo scales better to larger domains, finds deeper rules than prior tools, and enables rule inference in new domains that are out of scope for prior techniques.

Sandia National Laboratories — June 2024 - June 2025
Research Intern, Advisor: John Bender
Contributed to formally-verified compiler for concurrent programs, implemented in Rocq. Implemented backwards-simulation proof demonstrating equivalence between concurrent semantics and single-threaded semantics.

Brown University — Jan. 2016 - May 2016
Advisor: Shriram Krishnamurthi

Used Liquid Haskell refinement types to statically analyze R programs with matrix operations and surface matrix arithmetic errors as static type errors.

Teaching Experience

Programming Languages, UW, Instructor	Summer 2025
Programming Languages, UW, Co-Instructor	Fall 2024
Software Design & Implementation, UW, TA	Winter 2024
Grad. Programming Languages, UW, TA	Winter 2023
First Byte of Computer Science, Brown University, TA	Spring 2017
Programming Languages, Brown University, Head TA	Fall 2016
Logic for Systems, Brown University, TA	Spring 2016
Intro. Functional Programming, Brown University, Head TA	Fall 2015
Intro. Object Oriented Programming, Brown University, TA	Spring 2015
Intro. Functional Programming, Brown University, TA	Fall 2014

Professional Experience

Code.org, Software Engineer — Jan. 2019 - Jan. 2022

Full-stack developer working on block programming environments for K-12 students. Significant projects include:

- New block programming environment for writing and analyzing poetry.
- Migration of Blockly block-based editor to new version.
- Robust run-time validation system for Sprite Lab (elementary school students) with responsive feedback.
- Data library and visualization tool for AP CS Principles.

Google, Software Engineer — Sept. 2017 - Jan. 2019

Cloud Storage Security & Privacy

Implemented a FlumeJava pipeline to analyze object metadata in preparation for major metadata migration.

Android Maps

Implemented features to provide fresher data on the Maps directions screen for limited connection and low-bandwidth settings.

Service & Outreach

PNW PLSE — May 2025
Co-Chair

UW Pre-Application Mentorship Service — October 2024
Mentor

PNW PLSE — May 2024
Co-Chair

SPLASH OOPSLA 2024 — January 2024
Artifact Evaluation Committee

PNW PLSE — May 2023
Co-Chair

Rainier Scholars — Aug. 2018 - March 2020
Lecturer

Google CS Summer Institute — July 2018
Teaching Assistant

Brown University Women in CS — Sept. 2015 - May 2017
Peer Mentor