skanosue.com Berkeley, CA sorakanosue@berkeley.edu

M.S. Student in Electrical Engineering and Computer Sciences at UC Berkeley advised by Sarah Chasins, where my research focuses on programming languages and how they can be made more usable.

Education

M.S. in Electrical Engineering and Computer Sciences University of California, Berkeley 2023–2024

B.A. in Computer Science, Minor in Math University of California, Berkeley 2019–2023 GPA: 3.97

Projects

CNL

Python

An embedded domain-specific language that makes it possible to write a data pipeline in less than 100 lines of code

RISCV151

Verilog, RISC-V

A 3-stage pipelined CPU achieving 96.1% branch prediction accuracy on matrix multiplication benchmarks

SEPO

RISC-V

Building a symbolic execution engine to find peephole optimizations for RISC-V compiler outputs

Areas of Interest

Programming Languages, Human-Computer Interaction, Computer Architecture

Experience

Researcher

PLAIT Lab

January 2022-Present

Designing and implementing a domain-specific language to write data processing tools, allowing nontechnical users to solve problems normally requiring programming experience

Treasurer

Berkeley Model United Nations

May 2022-Present

Designed and oversaw the creation of a Java-based invoice automation system serving over 200 clients with transactions annually totaling over \$140,000

Software Development Engineering Intern

Amazon

May-August 2022

Implemented server-side rendering for Amazon Photos Info-Panel feature for Fire TV's Ambient mode using Java and Alexa Presentation Language

Software Engineering Intern

Cohesity

May-August 2021

Developed a Python and Bash-based parallelized pre-upgrade check for Cohesity's distributed system clusters

Teaching

Computer Security—Summer 2023
Programming Languages and Compilers—Fall 2023

Awards

Phi Beta Kappa EECS151/251A Outstanding Designer Award Dean's List x2 Honors To Date x7

Skills

Python, Java, OCaml, Verilog, x86, RISC-V, C