SHAYAN DAIJAVAD

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EDUCATION

California Polytechnic State University – San Luis Obispo
Bachelor of Science Degree in Computer Science Sept 2021 – June 2025
GPA: 3.852
Blended Master of Science Degree in Computer Science January 2025-June 2026

SKILLS

Programming: Python, Java, C, ARM v8 Assembly, JavaScript, HTML, CSS, Racket, MySQL, C#, C++
Software Tools: React, MPI, MongoDB, Unix, git, Docker, Vue.js, Unity, Godot, NetworkX, LLVM, Numpy, PyTorch
Relevant Knowledge and Coursework: Operating Systems, Compilers, Deep Learning, Dynamic Web Dev, Databases, Algorithms, Computer Networks

EXPERIENCE

Hack4Impact Developer, Hack4Impact Cal Poly October 2024-Present

- Currently learning React and other web dev technology in the new developer bootcamp.

Algorithms Student Researcher, Cal Poly SLO SURP July 2024-Present

- Advised by Professor Daniel Frishberg, I developed C++ code to randomly sample independent sets in trees to narrow down the mixing time of a Markov Chain.

Computer Science Tutor, Cal Poly SLO Oct 2023-Present

- Tutoring other students in Cal Poly's CSC 101, 202, 203, 225, and 357 courses at the CSSE Tutoring Center.

PUBLICATIONS

Peer Reviewed Conference Papers

- Daijavad, Shayan and Migler, Theresa. *Democracy in the Diaspora: The Role of Politics in Migration Networks.* In proceedings of *Complex Networks 2024*, Springer-Verlag (forthcoming).

PROGRAMMING PROJECTS

ARM Compiler for the Mini Language, Compiler Construction Partner Project
Languages and Tools Utilized: Java, ARMv8, LLVM

- Built a functional compiler in Java for a C-like language called Mini.
- Implemented static semantic analysis, LLVM intermediate representation generation, and ARMv8 generation.

Selective Reject File Copy Program, Networks Project
Languages and Tools Utilized: C

- Built a server and client program that communicate via UDP, using Selective Reject ARQ, to transfer requested files to the client.

Christofides Algorithm Simulation, Personal Project
Languages and Tools Utilized: Python, Pygame, NetworkX

- Developed a Python program that allows you to visually step through the Christofides Algorithm on randomly or manually generated graphs of any size.

Social Recipe Website, Intro to Software Engineering Group Project
Languages and Tools Utilized: Vue.js, Node.js, Axios, Express.js, TypeORM

- Developed a social web app for user account creation, recipe posting with images, event creation by zipcode, account following, recipe browsing, and review posting.