# **Aaron Ahmadyar**

■ aaron.ahmadyar@gmail.com | 📞 510.944.6611 | 🖸 aahmadyar123 | 🗣 Fremont, CA

### **EDUCATION**

## California Polytechnic State University

Bachelor of Science in Computer Engineering

San Luis Obispo, CA Sep. 2020 - Present

• Relevant Coursework: Fundamentals of Computer Science, Data Structures, Object-Oriented Programming and Design, Design and Analysis of Algorithms, Software Engineering, Systems Programming, Database Systems, Computer Architecture, Discrete Structures, Computer Design and Assembly Language Programming

• GPA: 3.82 as of Fall 2023

## **PROJECTS**

# Ai Vision Engine (In Progress)

• Led a team of five engineers to develop an AI imaging engine proficient in sample tube identification and precise x, y, z object positioning for Motiv Space Systems, Inc.

# CookMyFridge

- Developed a web application using NodeJS, ExpressJS, ReactJS, and MongoDB to provide users with recipe suggestions from 3rd party API based on input ingredients.
- Implemented JWT based user authentication and authorization for secure website access.
- Applied Scrum methodology to effectively manage the project, facilitating regular progress, collaboration, and continuous improvement.

#### MIPS Simulator

- Implemented Java code to parse and execute MIPS assembly instructions, including handling branching, function calls, and memory access.
- Developed a 5-stage pipeline to simulate CPU behavior and handle multiple instructions simultaneously, improving program execution speed and complexity.
- Designed and implemented a branch predictor to improve the performance of the MIPS simulator.

# **Checkers**

- Developed a two-player checkers game using Python and the Tkinter library for the graphical user interface.
- Implemented mouse controlled piece movement.

# **SKILLS**

Languages: Python, Java, C, JavaScript, SQL, Bash Technologies: NodeJS, ReactJS, ExpressJS, MongoDB Certifications: The Web Developer Bootcamp 2023 (Udemy)

Other Skills: Git/GitHub, Agile/Scrum

# **WORK EXPERIENCE**

# **California Polytechnic State University**

Instructional Student Assistant

San Luis Obispo, CA Sep. 2023 - Present

- Graded assignments in the Object-Oriented Programming and Design course.
- · Assisted students during lab sessions, offering guidance and clarification on programming tasks.