Jae Won Kim

(323)-229-2230 | jaewon_kim@berkeley.edu | linkedin.com/in/jae-won-kim-5a3556190

EDUCATION

University of California, Berkeley

Berkeley, CA

Master of Engineering in Electrical Engineering and Computer Science

 $May\ 2025$

University of California, San Diego

San Diego, CA

Bachelor of Science in Computer Science, GPA: 3.98

Dec. 2023

EXPERIENCE

Software Development Engineer Intern

May 2024 – Aug. 2024

Amazon

Sunnyvale, CA

- Moved from Amazon Science Engineering team to work in the SLAM team of Amazon's Consumer Robotics org.
- Designed, implemented, and tested the org's first framework for testing robots in simulation using Python and C#.
- Completed project ahead of schedule, exceeding requirements, and secured an inclined full-time offer.

Software Development Engineer Intern

June 2023 – Sep. 2023

Amazon

Irvine, CA

- Created a new, scalable, and automated search system backed by a machine learning model for internal research papers capable of supporting 100,000 papers and 8,000 queries per day using Python, TypeScript, and AWS.
- Used Agile methodology to design, implement, and test the search system.
- Built and used fully CD pipelines.
- Completed project on schedule, met all p0 requirements, and secured an inclined full-time offer.

Research Group Leader

Sep. 2021 – Dec. 2023

UC San Diego

San Diego, CA

- Led a group of 5 in researching security vulnerabilities of modern CPUs through reverse engineering using C++, X86 Assembly, and Python.
- Communicated weekly with faculty advisors and organized group meetings.
- Submitted and presented findings at the ERSP National Conference 2022.

Software Development Engineer Intern

June 2022 – Sep. 2022

Amazon

Remote

- Created a secure, interactive internal technology radar using TypeScript, HTML, Python, and AWS resources.
- Used Agile methodology to design, implement, and test the tool.
- Held weekly meetings with customers and product managers to determine optimal design choices.

Projects

Mobile Manipulation | Python, Reinforcement Learning, Design Optimization, Issac Sim Sep. 2024 – May 2025

- Optimizing a manipulator's physical parameters and configuration using simulation testing.
- Working towards having the manipulator perform increasingly complex tasks through reinforcement learning and measuring performance.

Designing Custom Microprocessor | Verilog, Computer Architecture, Python

Sep. 2023 – Dec. 2023

- Tasked to create a microprocessor with a 9-bit instruction length capable of performing single bit error correction and double bit error detection on incoming messages.
- Designed, implemented, and tested the processor, ISA, assembler, and the actual assembly code for single bit error correction and double bit error detection.

TECHNICAL SKILLS

Languages: Java, C++/C, Python, TypeScript, HTML, Assembly

Frameworks: React, Node.js, Flask, JUnit, Unity

Developer Tools: Git, Docker, VS Code

Libraries: pandas, NumPy, Matplotlib, AWS SDK