Derrick Lin

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EDUCATION

University of California, San Diego

Bachelor of Science in Computer Engineering and Cognitive Science (Machine Learning & Neural Computation), GPA: 3.5 **Relevant Courses:** Software Engineering, Data Structures/Algorithms, Machine Learning, Quantitative Finance, Operating Systems

Academic Awards: Provost Honors (3x)

WORK EXPERIENCE

TipTop Technologies

January 2025 - Present

Expected: June 2026

Software Engineering Intern

Sunnyvale, CA

Designed RESTful API endpoints in Flask to safely deactivate assets and feeds in a MySQL-integrated web application
Supermicro
June 2024 - September 2024

System Engineer (GPU Team)

San Jose, CA

- Diagnosed and resolved 95% of operating system and server hardware issues on x86 and ARM systems, improving system reliability by 40%
- Implemented and adapted training and inference pipelines for LLaMA large language models on ARM architecture, optimizing VLLM configurations and dependency management to ensure compatibility, increasing model accuracy by 30%
- Streamlined pipeline for updating system data by developing **Bash** and **Python** scripts to automate data processing tasks, resulting in a 100% reduction in manual intervention

CodePath May 2024 - August 2024

Tech Fellow

San Francisco, CA

 Mentored 30 students weekly in data structures and algorithms, resulting in a 25% improvement in problem-solving accuracy

Stanford University April 2024 - June 2024

Section Leader

Palo Alto, CA

• Led weekly lab sessions for **20+ students** in Python programming and data structures, reinforcing core concepts and enhancing students' coding proficiency

Qualcomm Institute

January 2024 - June 2024

Software Engineering Intern

San Diego, CA

- Developed a high-resolution **digital twin** of UCSD Campus using drone-based 3D photogrammetry, increasing spatial accuracy by 50% for campus enhancements
- Enhanced solar panel positioning and weather modeling by integrating **Python** scripting in Unreal Engine with a C++ plugin and utilizing the **AWIPS library** to optimize daily sunlight variations

LearnWise AI October 2023 - December 2023

Software Engineering Intern

Remote, CA

- Developed and deployed AWS Lambda functions, resulting in faster response times for products like chatbots
- Automated customer data processing using **Python** and **AWS batch jobs**, reducing manual work by 40% and increasing data processing speed by 60%

LEADERSHIP EXPERIENCE

Computer Science and Engineering Society (CSES) at UCSD

September 2023 - June 2024

Event Director

San Diego, CA

- Directed 40+ technical workshops and social events annually, reaching over 2000 students
- Launched a mentorship program that increased student participation in computer science by 50%

PROJECTS

Dev Journal | Demo | Github Code | (HTML, CSS, JavaScript, Node.js, Express.js, Jest-Puppeteer, SQLite)

2024

 Created a privacy-focused note-taking application using AGILE methodologies, improving data security and user experience

TECHNICAL SKILLS

Languages | Java, Python, JavaScript, C, C++, HTML, CSS, MATLAB

Technologies | React, Node.js, Next.js, FastAPI, PostgreSQL/SQLite, MongoDB, Express, Git, JUnit, TensorFlow, PyTorch **Software** | AWS, Google Cloud Platform, Heroku, Valgrind, Firebase, Postman