Min Aung Paing

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Education

University of California, San Diego (UCSD) — Expected in Jun 2026
Bachelor of Science in Computer Science — *San Diego, CA*
GPA 3.93

Experience

Software Engineer Intern — Jun 2025 - Present
University of Southern California (USC) — *Los Angeles, CA*

- Developed an end-to-end deployment pipeline to run OpenVLA on a physical robot (**xArm7**), including real-time image preprocessing, model inference, and action execution
- Benchmarked OpenVLA performance in both **simulation** (LIBERO, SimplerEnv) and **real-world** zero-shot settings, analyzing the impact of environment familiarity on success rates
- Built and integrated a GELLO **teleoperation system** to enable efficient demonstration collection, and designed a modular data collection framework for OpenVLA fine-tuning

Machine Learning Intern — Aug 2024 - Dec 2024
American Express — *Los Angeles, CA*

- Collaborated with a team of 5 fellows and an Engineering Director to iteratively enhance data preprocessing, feature engineering, and model tuning for **high-accuracy PII (Personally identifiable information) detection**
- Developed and optimized a **hybrid entity recognition approach**, leveraging Regex, Named Entity Recognition (NER), and Large Language Models to enhance detection accuracy, and achieve over **90% precision** in identifying and redacting PIIs
- Utilized Microsoft Presidio and **spaCy model** for entity detection, integrating format-preserving encryption (FPE) to maintain data format for alphanumeric entities

Full-Stack Developer Intern — Jul 2024 - Oct 2024
Think Round Inc — *Remote*

- Managed the migration of Think Round's website from SquareSpace to a custom-built platform, enabling greater control over design, improving site performance, and simplifying maintenance
- Collaborated with designers to refine the UI/UX and develop the frontend using **React and Next.js**, enhancing responsiveness, enabling smoother animations, and creating an immersive interactive experience for virtual museum exhibits
- Built a **backend system using Node.js and Express with a MongoDB database**, facilitating dynamic content updates and improved scalability, while developing RESTful APIs to efficiently manage data flow between the frontend and backend

Mobile App Development Intern — Apr 2024 - Jul 2024
Pasadena City College — *Pasadena, CA*

- Collaborated with software engineering students and UX/UI designers to develop cross-platform iOS and Android college app, facilitating streamlined communication for **over 20,000 students** and multiple college departments
- Integrated SAML-based Single Sign-On (SSO) for secure and seamless user authentication, utilizing a custom Identity Provider (IDP) for enhanced security, reduce login friction, and improve user experience across various college services
- Developed and implemented key app features using **Angular and Ionic frameworks**; ensured efficient task tracking and project alignment through **Asana** for organized and timely project delivery

Projects

CPP-ASM-Exam APP | *ASM x86, C++, Cmake, Javascript, Electron* — July 2024

- Built a **cross-platform C++ application** with an integrated **Electron front-end**, applying modular design principles for high performance and **portability across operating systems**
- Integrated a **native C++ compiler and ASMx86** runtime environment using Monaco Editor and CMake, enabling **low-level code editing, compilation, and execution** within an isolated sandbox
- Implemented system-level process management and custom security hooks to restrict OS shortcuts and prevent unintended process termination ensuring stable runtime and controlled execution

Technical Skills

Languages: Python, Java, Ruby, Go, Rust, JavaScript, Typescript, C/C++, HTML/CSS, SQL, MongoDB
Frameworks/Tools: React, Ionic, Node.js, Tailwind, Azure, Git, Docker, Electron, Firebase, CUDA, Kubernetes
Libraries: PyTorch, TensorFlow, Scikit learn, pandas, Numpy, Matplotlib, Seaborn, Cython, FAISS