Albert (Wei Jun) Ong

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Education

University of California, Los Angeles — Los Angeles, CA
Bachelor of Science in Computer Science — *Expected Graduation: Jun 2025*

- GPA: 4.0/4.0
- Upsilon Pi Epsilon (Computing Honor Society), Tau Beta Pi (Engineering Honor Society)
- Relevant coursework: Data Structures and Algorithms, Computer Architecture, Algorithms and Complexity, Software Construction, Real Analysis, Discrete Structures, Linear Algebra, Multivariable Calculus

Technical Skills

Languages: Python, Java, JavaScript, C, C++, Go, SQL, JPQL, HTML/CSS, Bash
Frameworks: React Native, Spring Boot, Express, Gin, JAX
Libraries: React, NumPy, Redux, pandas, scikit-learn, GORM
Others: Docker, Kubernetes, Amazon Web Services, Node.js, MongoDB, MySQL, PostgreSQL, Git, Postman

Experience

ISAFE Enterprises, Carlsbad, CA | *Software Engineer Intern* — Jun 2023 – Present

- Building Android and iOS application using React Native

Physics of AmoRphous and Inorganic Solids Lab, UCLA | *Research Assistant* — Oct 2022 – Present

- Developing a Python differentiable molecular dynamics framework for peridynamics simulation using Google JAX
- Refactoring Lattice object and creating unit tests for 4 core functions to improve simulation box initialization
- Overhauling the per-atom dilatation calculation module and devising 3+ comprehensive test environments

STACS, Singapore | *Software Engineer Intern* — Jan 2022 – Jul 2022

- Developed 7+ critical post-trade reporting and asset servicing modules using React and Java
- Designed and implemented REST API for 5 modules within securities management platform
- Fixed and optimized JPQL queries spanning 15+ columns in 5+ relational databases to fetch asset details
- Co-authored company's internal React library (used by 20+ developers) to refactor frontend codebase

Singapore University of Technology and Design, Singapore | *Student Researcher* — Mar 2018 – Feb 2019

- Developed a supervised Machine Learning program to classify unstructured texts in cybersecurity reports PDF
- Optimized ML program to achieve 83.3% accuracy by using TF-IDF at character level for text vectorization

Activities

Daily Bruin, UCLA | *Software Engineer* — Oct 2022 – Present

- Designing Go backend modules for management platform, which monitors the statuses of 7+ websites used by 200+ editors in UCLA's student-run newspaper organization
- Developing cron job logic to enable concurrent website health checks using Go's concurrency model and reduced error discovery time to minutes
- Implementing RESTful endpoints and database schemas for CRUD operations
- Containerizing and managing projects using Docker and Kubernetes

Projects

Bruin Laundry | github.com/g1oom/Laundry-Room-Maintenance-Portal — Feb 2023 – Mar 2023

- Created a dynamic web application to report and inform broken laundry machines in UCLA dorms
- Built REST API using Node and Express to facilitate fetching and updating of machine statuses
- Final Project for COM SCI 35L: Software Construction

Discord Reminder Bot | github.com/g1oom/reminder_bot — Aug 2021 – Sep 2021

- Created a Discord bot using discord.js, allowing users to add and view reminders in channels
- Utilized Discord's API to create commands and design events