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
- Junior class level
- Relevant coursework: Data Structures and Algorithms, Computer Architecture, Software Construction, Real Analysis, Discrete Structures, Linear Algebra, Multivariable Calculus

EXPERIENCE

Undergraduate Research Assistant

Oct 2022 – Present

Physics of AmoRphous and Inorganic Solids Lab (PARISlab), UCLA

Los Angeles, CA

- Developing a Python differentiable molecular dynamics framework for peridynamics simulation using Google JAX
- Implementing automatic differentiation and parallel programming features to improve framework performance

Software Engineer Intern

Jan 2022 - Jul 2022

STACS (Hashstacs Pte Ltd)

Singapore

- Developed critical post-trade reporting and asset servicing modules using React and Java
- Implemented REST API with Spring Boot and improved performances of MySQL queries
- Co-authored company's internal React library to refactor frontend UI for consistency and reusability

Student Researcher (Research Mentorship Programme)

Mar 2018 – Feb 2019

Singapore University of Technology and Design

Singapore

- 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

Software Engineer

Oct 2022 – Present

Daily Bruin, UCLA

Los Angeles, CA

- 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

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C, C++, Go, SQL, HTML/CSS

Frameworks: React, Spring Boot, Express, Gin, JAX Libraries: NumPy, Redux, pandas, scikit-learn, GORM

Others: Docker, Kubernetes, Node.js, MongoDB, MySQL, PostgreSQL, Git