William Santosa

SKILLS

- Python, C, C++, Java, JavaScript, Go / Golang, SQL, PostgreSQL, SQLite, Linux, Windows, Git, Bash, AWS
- Data Structures, Algorithms, OOP, SDLC, Unit / Integration / Functional Testing, CI/CD, English, Bahasa (Indonesian)

EDUCATION

University of California Los Angeles (UCLA)

Los Angeles, CA

MS in Computer Science, GPA: N/A.

June 2023 - June 2025

University of California Santa Cruz (UCSC)

Santa Cruz, CA

BS in Computer Science, Cum laude, GPA: 3.86/4.00.

June 2020 - June 2023

Coursework: Database Systems, Web Development, Models and Algorithms, Computer System Design, Computer Architecture.

WORK EXPERIENCE

Maxar Technologies San Jose, CA

Software Engineering Intern

June 2022 – September 2022

- Designed and developed internal system feature for new Intelsat C-band Satellites (Galaxy-31 and Galaxy-32).
- Automated and optimized weekly database installations of telemetry data.
- Added persistent storage option, automatically uploading new telemetry information to physical data stores.
- Continuous Integration / Deployment, Agile, Scrum, pull requests, code reviews, collaborative coding, unit testing.

University of California Santa Cruz (UCSC)

Santa Cruz, CA

Research Assistant March 2022 – June 2022

• Collaborated on machine learning program to identify Higgs boson particle's correlating variables from sample size of over 200,000 events using Keras, TensorFlow, matplotlib, pandas, dBase, and Jupyter Notebook.

LEADERSHIP

Baskin Engineering at UCSC

Santa Cruz, CA

Academic Tutor

April 2023 – June 2023

Taught over 50 students weekly by emphasizing conceptual understanding of topics (Recursion, abstraction, typing, etc).

University of California Santa Cruz (UCSC)

Santa Cruz. CA

Peer Navigator

June 2021 – December 2021

Helped over 100 students weekly by guiding and mentoring them in addition to planning and supervising university events.

Koo's Martial Arts

San Ramon, CA July 2017 – August 2021

- Instructor & Coach
- Taught forms, techniques, and philosophy of Taekwondo, supervising and coaching students at tournaments.
- Communicated with parents about events and notices, built / maintained long-term relationships with parents and students.

PROJECTS

Not Clash v2

- Processes and facilitates League of Legends matches, stores data, and interacts with users via Discord.js API.
- Deployed in AWS EC2 and used in Discord server with over 100 members during 2022 and 2023 summer.

Database Management System

- Relational manager, index manager, and query engine to store relational data (real, int, varchar) with SQL CRUD operations.
- Efficient indexing of attribute(s) through B+ trees on table columns and persistent storage by updating after operations.

Email Clone

- Implemented web application: webpages, database, and server to process data, authenticated using JWT and REST API.
- Jest test coverage of 100% (Statements, Branch, Functions, Lines), complete with unit, functional, and integration testing.

HTTP Server

- Multithreaded server processing HTTP requests (GET, PUT, APPEND) with functional request log and status codes.
- Thread-pool design with dispatcher thread, multiple (1+) worker threads, and work queue.

HOBBIES AND INTERESTS

• Video Games, Programming, Hiking, Ukulele, Photography, Taekwondo, Kung Fu, Gym, Travel