Gabriel Kenneth L. Mariñas

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EDUCATION

University of the Philippines Diliman

Bachelor of Science in Computer Science (1.3206, Magna Cum Laude)

Quezon City, Manila Aug. 2019 – Jul. 2023

University of Santo Tomas

Senior High School Academic Track - STEM Strand (Final Average: 90.70)

Manila, Metro Manila

Aug. 2017 - May 2019

Experience

UPD DCS NDSG | Researcher

September 2022 - February 2023

- Became a researcher for the Networks and Distributed Systems Group of the UP Diliman Computer Science Department.
- Investigated the use of classifier algorithms and blockchain technology in securing IoT networks.

Saperium | Software Engineer Intern

June 2022 - August 2022

- Created a full-fledge Wikipedia clone with modern features such as data caching and real-time web.
- Implemented the video and comment API for the interns' collaborative project a Youtube clone.
- Worked through the projects following the Agile methodology.

UP DLRC | Tutor

November 2021 - December 2021

- Created a sample exam and made corresponding solution videos as a supplementary aid for students undertaking Calculus.
- Tutored around 60 undergrads who are about to take their Final Exam in Calculus through a live video session.

PROJECTS

GBIPG | Processing, Python

May 2022 - June 2022

- A terminal application that generates a color vision test plate (*Ishihara plate*) from an image input through a novel implementation that models the problem as a *Constraint Satisfaction Problem* and solves it using backtracking and constraint propagation.
- Can generate an Ishihara plate 9.31 times faster than the traditional Monte Carlo Method implementation.

WikiClone | Javascript, HTML/CSS, MySQL

June 2022 - August 2022

- A clone of the Wikipedia website that includes features like article CRUD functionality, user role system, and article version control system.
- Uses a flat table implementation for its database schema for faster reading time, uses *Redis* for caching recently viewed articles in memory, and uses *Socket.io* for real-time update on article and user changes.

\mathbf{CRS} Seeker | Python

December 2021 - January 2022

- A terminal application that scrapes the *UP Computerized Registration System* (CRS) website and ranks the available courses in the pre-enlistment page based on the highest chance of getting in.
- Used in acquiring full units for my Junior and Senior year.

AWARDS

DOST Merit Scholar

August 2019 - July 2023

University Scholar

A.Y. 2021-2022, A.Y. 2022-2023

TECHNICAL SKILLS

Languages: Python, Typescript, Javascript, Rust, C, HTML/CSS, SQL

Frameworks/Libraries: Angular, React, Node, Express, Redis, Numpy/Pandas/Pyplot, scikit-learn

Dev Tools: Git, Bash, VS Code, Vim

OS/Platforms: Windows, Linux, Mac, AWS