https://qihenglee.github.io./
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Qi Heng Lee

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Languages: Java Python C C++ OCaml MicroPython HTML Javascript CSS Dart
Technologies: React Flutter Django Laravel Node.js PHP SQL Git Android Studio Raspberry Pi

Education

B.S. Computer Science, University of Minnesota – Twin Cities
GPA: 3.71/4.00 | ***Expected Graduation:*** December 2021 | ***Award:*** Dean's List

Experience

Incoming Web Design/Server Research Assistant ***Start Date:*** *Jan 27th 2020*
University of Minnesota Research Facility – Mechanical Engineering Department

- Development of air filter performance web application with a ***JavaScript*** frontend and ***Python*** backend.
- Development of server with ***Python Django*** framework libraries based on facility needs.
- Assist in the design of documentation associated with server development projects and implementation of backend database in ***SQLITE3***.

Co-Founder / Software Developer *Dec 2019 - Present*
Impresso Labs

- Worked with a team of developers in a startup to develop a Professional Networking application which assists in setting up face to face meetups.
- Managed the migration of the existing ***Laravel*** based web application onto ***Flutter*** for mobile application developments.
- Implemented location and notification features with ***Flutter*** to obtain user's real time location and to push notifications for every meetup engagement.

Student Software Developer *July 2019 – Sept 2019*
University of Minnesota Research Facility – Civil Engineering Department

- Developed a beacon in ***MicroPython*** using micro-controllers together with the GPS and LTE module.
- Decreased beacon power consumption by 30% by implementing a new IoT development board.
- Managed the transition of code from an existing prototype in **Pyboard** to the new **Pycom** board.
- Improved efficiency and readability of existing modules through refactoring and writing documentations.

Can You Hack It Hackathon *Oct 2018*
Hong Leong Bank, Malaysia

- Developed a mobile application that facilitates personal financing by categorizing payments for data visualizations.
- Built with ***Android studio*** and implemented hash table in keyword matching to categorize payments.

Personal Projects

Foodie

- Web application that provides a simple and efficient way of getting grocery list based on selected food recipes.
- Built using ***React*** together with the implementation of Food2Fork recipe API to retrieve data in JSON.
- Designed ***RESTful backend server*** to enabled saved recipes to be stored persistently in an online database.

FaceSmart

- Web application that detects faces in photos.
- Designed and built with ***React*** together with the implementation of ***Clarifai's face recognition API***.
- Applied ***PostgreSQL*** data management system to manage and store the users' data.

Guide glasses for the Blind

- Created a pair of glasses powered with **Raspberry Pi** in ***Python*** to help the visually impaired.
- Implemented ultrasonic sensors and infrared sensors to detect objects in their surroundings.
- Applied GPS module for navigation and safety purposes with implementation of automated speech libraries.
- International Invention and Technology Exhibition 2016 ***Gold Award*** (Malaysia)
- International Exhibition for Young Inventors 2016 ***Silver Award*** (China)

Leaderships

Taylor's University Symphony Orchestra Concertmaster & Penang Philharmonic Orchestra Assistant Principal

- Managed weekly sectionals with strict discipline and enhanced collaborations among the players.

High School Robotics' Club President

- Brought in the idea of teaching Arduino and Raspberry Pi after class to promote STEM in my school.