Qi Heng Lee

lee02305@umn.edu | (612) 987-7627 | https://qihenglee.github.io./ | linkedin.com/in/qi-heng-lee-732b08180

About Me

I am currently an undergraduate studying at the University of Minnesota, majoring in computer science. I am passionate about all things in computer science, particularly in software development and hope to learn more about data science and machine learning. I usually use my free time to practice Leetcode and have experience programming in many different languages such as C, C++, Python, Java and more. For the past summer, I worked at a school research facility for Minnesota Traffic Observatory as a student software developer. I was assigned to build a beacon prototype that helps to collect road construction data and send it back to our servers through LTE. It does take extra effort, time, and passion to learn new languages and hardware systems having that this is kind of new to me, but I was able to gain valuable skills about the Internet of Things as well as improving my coding skills throughout my days at work.For the Summer 2020, I am actively seeking to obtain an internship position as a Software Engineer and hope to utilize and showcase my ability and knowledge in software developments, data structures and algorithms

Education

B.S. Computer Science, University of Minnesota – Twin Cities — Jan 2019 – Present
Technical GPA: 3.75/4.00

American Degree Transfer Program (ADP), Taylor's University — Jan 2017 – Dec 2018
CGPA: 3.52/4.00, Dean's List, Cum Laude Award

Experience

Student Software Developer — Jun 2019 – Sep 2019
University of Minnesota Research Facility – Minnesota Traffic Observatory

- Worked with my supervisor to prototype a road construction monitoring beacon, a beacon that will be deploy on roads to determine the location of road constructions while monitoring traffic
- Developed a prototype beacon in MicroPython using Python-based micro-controllers together with the Gravitational Positioning System module and the LTE module.
- Transferred small packets of data over LTE back to the servers in University of Minnesota, which will be display with the implementation of Google Map API
- Improved efficiency and readability of existing modules through refactoring and writing documentation
- Optimized the power consumption for the beacon
- Gain skills in the Internet of Things technology while configuring and working on data transfers over the LTE

Student Tech Support Services — 2019
Wilson Library – University of Minnesota

- Worked in a small interdisciplinary team that helps to create new items for incoming books and sort books using the Ex-Libris software
- Assisted in claiming of missing book renewals using Ebsconet, to reduce monetary loss in the library

Can You Hack It (Hackathon) — 2018
Hong Leong Bank

- Participated in a hackathon organised by Hong Leong Bank to gather solutions for the banking industry
- Developed backend system for a mobile app that facilitates personal financing by visualizing the users' historical data and statistics from their daily spending using Java and Android Studio

Projects

Facemoji - Personal Project — Nov 2019 – Present

- An application that will detect your face and change it into different emojis based on your emotions
- Developing an emotion classification model trained using 5000+ photo data entries using deep learning frameworks on Tensorflow

FaceSmart - Personal Project

- A web application that allows us to submit photos of people in which it will detect faces in the photo
- Designed and built with React together with the implementation of the face recognition API
- Applied PostgreSQL data management system to manage my users' data

Foodie - Personal Project

- An application that provides us a simple and useful way of getting grocery lust based on user's recipes
- Built and designed with React together with the implementation of the Food2Fork recipe API

Portfolio Website - Personal Project

- Built a portfolio website with HTML, CSS, Javascript to showcase my projects
- Portfolio Link: https://qihenglee.github.io./

Guide glasses for the blind – Group Project

- Glasses developed to help the visually impaired to live a better life and make life safer for them on the road
- Built with Raspberry Pi
- Implementation of ultrasonic sensors and infrared sensors to detect objects in the surrounding
- Familiar but not proficient in 3D data visualization
- Built in GPS systems for navigation and safety purposes with the implementation of Google Maps APIs

Skills

- Languages: Java, Javascript, Python, HTML, CSS, C/C++, OCAML, MicroPython
- Technologies: Node.js, React, SQL, Android Studio, Git, Raspberry Pi, Arduino, Internet of Things(IoT), Tensorflow
- Operating Systems: macOS, Window