James Young

→ +852 95731718 | jyyoungaa@connect.ust.hk | jamesyoung-15 | lin linkedin.com/in/jamesyyoung

EDUCATION

The Hong Kong University of Science and Technology

BEng in Electronic Engineering

Hong Kong Sept. 2020 – Present

Relevant Coursework

- Intro. to Computer Science
- Programming with C++
- Object-Oriented Programming and Data Structures
- Intro. to Computer Organization and Design
- Computer Communication Networks
- Data-Driven Portfolio Optimization

SKILLS

Programming Languages: C++, Javascript, Python, SQL (Postgres)

Frameworks: NodeJS, ExpressJS, Django Tools/Platforms: Git, Docker, Linux

Languages: English (Native), Mandarin (Conversational)

WORK EXPERIENCE

IoT Intern | Graphite Venture Limited

C++, ESP32, Arduino

 $December\ 2022-May\ 2023$

(Full and Part Time)

- Developed Arduino libraries for reading water sensor data with ESP32 and sending sensor data to AWS IoT Core through MQTT with a SIM7600G module.
- Created an Arduino library for communicating to multiple ESP32 with ESP-Now protocol.

Projects

To-Do List 🗹 | Django

- Created a to-do list website using Django framework with user authentication and ability for user to create, update, and delete each task.
- Deployed Django application on an AWS EC2 instance with Docker using Gunicorn, Nginx-Proxy, Letsencrypt, and Postgres as database.

$\textbf{Tic-Tac-Toe Multiplayer} \ \ \ \ \, \ \, \textit{YodeJS, SocketIO}$

- Created an online multiplayer Tic-Tac-Toe game using HTML, CSS, and Javascript for front-end and NodeJS and ExpressJS for back-end.
- Uses Socket.IO real-time communication between web browser and server for multiplayer aspect.

Mini Robot Cleaner 🗹 | C, STM32, Python

- Created a robot car with a STM32 board that can be wirelessly controlled through UDP transmissions and also has an autonomous free roam mode
- Integrated the bubble rebound algorithm for avoiding obstacles in free roam mode using 3 ultrasonic sensors
- Used Python for socket programming and PyQT5 to create GUI to control robot wirelessly

Extracurricular Activities

• HKUST Football Team