James Young

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

EDUCATION

The Hong Kong University of Science and Technology

Hong Kong

BEng in Electronic Engineering - Minor in Information Technology

Sept. 2020 - June 2024

SKILLS

Programming Languages: Python, C++, Javascript Tools/Platforms: Linux, Git, Docker, Ansible, Kubernetes

Cloud: AWS (DynamoDB, Lambda, EC2, S3)

Work Experience

Software Developer Intern | Intelligent Design Technology December 2023 - February 2024

- Developed a prototype for real-time human fall detection for a Raspberry PI based robot.
- Fall detection uses Tensorflow and Movenet for pose estimation and heuristics for determining fall.

Electronic Engineering Intern | Kolour Think Tank

August 2023

• Developed a digital utility meter reader that takes images of a utility meter with an ESP32-CAM, stores images to AWS S3, reads the meter reading with Rekognition, and stores the data in DynamoDB.

IoT Intern | Graphite Venture Limited

December 2022 - May 2023

• Developed Arduino libraries for reading water sensor data with ESP32 and sending sensor data to AWS IoT Core through MQTT.

PROJECTS

Air Quality Monitoring Dashboard

- A fullstack project that stores and displays my home's air quality sensor data using AWS services.
- Data is stored and retrieved on DynamoDB using REST API with API Gateway and Lambda. Front-end uses HTML, CSS, and Javascript.

Home Server

- Built home server running Proxmox for self-hosting services and applications such as Nextcloud using Linux containers and virtual machines.
- Applied various tools such as Docker for containerization, Grafana for monitoring, and Ansible for automation.

Mini Robot Cleaner

- Created a robot car cleaner with a STM32 board written in C that can be wirelessly controlled through UDP or can roam autonomously
- Used Python for socket programming and PyQT5 to create GUI to control robot wirelessly

Relevant Coursework

- Object-Oriented Programming and Data Structures
- Intro. to Computer Organization and Design
- Computer Communication Networks
- Cloud Computing and Big Data Systems