James Young

jyyoung@bu.edu | jamesyoung-15 | 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*

Boston University — United States
Master in Computer Science — *Sept. 2024 – Present*

Certifications

- AWS Certified Solutions Architect (SAA-C03)
- Red Hat Certified System Administrator (RHCSA)
- HashiCorp Certified Terraform Associate (003)

Skills

Programming Languages: Python, Javascript, Bash
Tools/Platforms: AWS, Linux, Git, Github Actions, Terraform, Docker
Others: Networking Concepts (VLANs, VPN, DNS, etc.)

Work Experience

Kolour Think Tank — Hong Kong
Electronic Engineering Intern — *July 2023 – August 2023*

- Developed a low-cost IoT serverless digital utility meter reader using ESP32-Cam and AWS services.
- Utilized S3 for storing images of utility meter, Lambda and Rekognition to extract image data, and DynamoDB for data storage.

Graphite Venture Limited — Hong Kong
IoT Intern — *December 2022 – May 2023*

- Created Arduino libraries in C++ for reading water sensor data with ESP32 and sending sensor data to AWS IoT Core with MQTT.
- Achieved 40% decrease in power consumption by implementing light sleep intervals in ESP32 and switching from HTTP to MQTT protocol.

Projects

Serverless Face Blurring

- An event-driven serverless application that allows users to upload images and blurs faces on the images. Front-end uses ReactJS and middleware uses Lambda functions in Python.
- Image processing uses Lambda and Rekognition, backend uses S3 and DynamoDB with SQS in-between to decouple the application.
- Implemented CI/CD pipeline using Github Actions and Terraform for automated deployment.

Home Server

- Built homelab running Proxmox using Linux containers and VMs for self-hosting services such as file and media servers, Github self-hosted runners, etc.
- Applied tools such as Grafana for monitoring, Terraform and Ansible for deploying and provisioning resources, etc.