James Young

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Education

Boston University MA, United States
Master of Science in Computer Science *September 2024 – Present*
- GPA: 4.0

Hong Kong University of Science and Technology Hong Kong
Bachelor of Science in Electronic Engineering, Minor in Information Technology *September 2020 – June 2024*
- GPA: 3.13

Skills

Technologies: Python, Javascript, SQL (MySQL), HTML/CSS
Libraries/Frameworks: React
Platform/Tools: Git, Github Action, AWS, Terraform, Linux, Docker

Projects

Serverless Face Blurrer *faceblur.jyylab.com*
React, Python, Lambda, DynamoDB, S3, Rekognition, Terraform
- Developed a full-stack application that automatically blurs faces in images uploaded to an S3 bucket with job queues stored in DynamoDB
- Frontend built with React and backend built with Python using AWS Lambda and Rekognition
- Deployed the application using Terraform with CI/CD implemented with Github Actions
- Improved system reliability by adding SQS to handle image processing jobs

Homelab *jyyhomelab.com*
Linux, Docker, Ansible, Terraform
- Built and managed a setup of servers and network equipment for experimenting, learning, and self-hosting services
- Utilized Proxmox for virtualization and OPNsense firewall for advanced network configurations (e.g., VLANs)
- Automated resource provisioning using Terraform and implemented system monitoring with Grafana

Certifications

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

Experience

Software Developer Intern December 2023 – Feburary 2024
Intelligent Design Technology Limited *Hong Kong*
- Developed a prototype for real-time human fall detection for a Raspberry PI based robot in Python
- Utilized OpenCV for video capture and Tensorflow with Movenet for pose estimation combined with heuristics for classifying fall

IoT Intern December 2022 – May 2023
Spotless Tech Limited *Hong Kong*
- Implemented C++ libraries for reading water sensors with ESP32 and sending sensor data to AWS with MQTT, achieved ESP32 20% power consumption reduction by implementing light sleep intervals.
- Worked on implementing peer-to-peer communication for activating nearby water pumps with multiple ESP32 devices. Increased communication range and speed by more than 10% by switching from BLE to ESP-Now.

Extracurriculars

NCAE Cyber Games Janurary 2025 – March 2025
- Joined the NCAE cyber security competition to compete against other students in capture the flag competitions