James Young

EDUCATION

Boston University

MA, United States

Master of Science in Computer Science

September 2024 - Present

• **GPA:** 4.0

• Relevant Coursework: Analysis of Algorithms, Database Management, Operating Systems

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

• Relevant Coursework: Computer Communication Networks, Cloud Computing and Big Data Systems, Deep Learning in Computer Vision, Object-Oriented Programming and Data Structures, Intro to Embedded Systems

CERTIFICATIONS

• AWS Certified Solutions Architect (SAA-C03)

• HashiCorp Certified Terraform Associate (003)

• Red Hat Certified System Administrator (RHCSA)

• CompTia A+ Certification

SKILLS

Technologies: Python, Javascript, SQL (MySQL)

Platform/Tools: Git, Github Action, AWS, Terraform, Linux (RHEL, Ubuntu, Debian), Docker

Others: Networking Concepts (TCP/IP, VLANs, etc.)

Projects

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

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

Extracurriculars

NCAE Cyber Games

January 2025 – March 2025

• Joined the NCAE cyber security competition to compete against other students in capture the flag competitions

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.