James Young

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EDUCATION

Boston University <div align="right">MA, United States</div>
Master of Science in Computer Science <div align="right">*September 2024 – Present*</div>
- **Relevant Coursework:** Analysis of Algorithms, Database Management, Operating Systems

Hong Kong University of Science and Technology <div align="right">Hong Kong</div>
Bachelor of Science in Electronic Engineering, Minor in Information Technology <div align="right">*September 2020 – June 2024*</div>
- **Relevant Coursework:** Cloud Computing and Big Data Systems, Deep Learning in Computer Vision, Object-Oriented Programming and Data Structures, Computer Communication Networks

SKILLS

Technologies: Python, Javascript, SQL (Postgres)
Platform/Tools: Git, Github Actions, AWS, Terraform, Linux, Docker

PROJECTS

Serverless Face Blurrer <div align="right">*faceblur.jyylab.com*</div>
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

STM32 Robot Cleaner <div align="right">*youtube.com/watch?v=z4BqyFa29B0*</div>
C, Python, STM32
- Created a robot car with a STM32 board that can be wirelessly controlled through ESP01 chip with UDP and can also roam autonomously whilst avoiding obstacles
- Integrated the bubble rebound algorithm for avoiding obstacles in autonomous free roam mode using 3 ultrasonic sensors
- Developed robot GUI control with UDP using Python socket library and PyQT5 to for GUI

CERTIFICATIONS

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

EXPERIENCE

Software Developer Intern <div align="right">December 2023 – Feburary 2024</div>
Intelligent Design Technology Limited <div align="right">*Hong Kong*</div>
- 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 <div align="right">December 2022 – May 2023</div>
Spotless Tech Limited <div align="right">*Hong Kong*</div>
- 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 <div align="right">Feburary 2025 – Present</div>
- Joined NCAE Cyber Games, a cybersecurity and CTF competition where our team competed against other universities and finished 1st in the regionals.