

James Young

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EDUCATION

Boston University

Master of Science in Computer Science

MA, United States

September 2024 – Present

Hong Kong University of Science and Technology

Bachelor of Science in Electronic Engineering, Minor in Information Technology

Hong Kong

September 2020 – June 2024

SKILLS

Technologies: Python, Javascript, SQL, HTML/CSS

Libraries/Frameworks: React, Numpy, Pandas, Pytorch, Matplotlib, Scikit-Learn

Platform/Tools: Git, AWS, Terraform, Linux, Docker

PROJECTS

Bluebikes Availability Predictor

bluebikespredictor.jyylab.com

Python, Pandas, Scikit-Learn, React, Docker, Terraform

- Built a machine learning application to forecast real-time Bluebikes availability for three stations near my home.
- Leveraged historical Bluebikes ridership data alongside temperature and precipitation data for training with Gradient Boosting Regressor model to predict bike demand.
- Used Flask to deploy prediction model for backend, front-end uses React to display availability forecasts, deployed application with Docker on EC2 with Terraform.

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 by users.
- Frontend built with React, middleware uses Lambda, Rekognition, SQS for event-driven architecture, backend uses S3 bucket with job queues stored in DynamoDB.
- Deployed the application using Terraform with CI/CD implemented with Github Actions.

CERTIFICATIONS

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

EXPERIENCE

Software Developer Intern

December 2023 – February 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

February 2025 – April 2025

- Joined NCAE Cyber Games, a cybersecurity and CTF competition where our team competed against other universities and finished 1st in the regionals.