

Jun Kit Lim

+1 (734) 450-5507 || junkit@umich.edu || <https://website-acty101s-projects.vercel.app/>

EDUCATION

University of Michigan (College of Engineering)

BSE Computer Science || Minor in Mathematics

Ann Arbor, MI

August 2022 – Present

- **CGPA:** 3.98, **Major CGPA:** 4.0
- **Coursework:** Operating Systems (current), Parallel programming with GPU (current), Combinatorics (current), Web Systems, Computer Organization, Data Structures & Algorithms, Programming Paradigms, Foundations of CS, Multivariable Calculus, Linear Algebra, Discrete Math

SKILLS

Programming Languages: Python, C/C++, JavaScript, TypeScript, HTML, CSS, SQL, Rust, Bash, Makefile, MATLAB, R, SWI-Prolog, Scheme

Technologies: Linux (Ubuntu 24.04, Debian 12, WSL2), Git, GitHub Actions, Docker, AWS (S3, EC2, DynamoDB, ECR, Amplify, Lambda, SQS), Flyte, React, Flask, CMake, CUDA

WORK EXPERIENCE

Keysight Technologies

Penang, Malaysia

R&D SWE Intern || Tech Stack: C/C++, Python, CMake, Bash, Makefile

May 2024 – July 2024

- Developed a multi-threaded Python GUI to display real-time Keysight instrument data with integrated AI-driven UI navigation and AI-powered data analysis capabilities
- Streamlined the GUI build process by integrating Bash scripts, CMakeLists.txt, and Makefiles to automate the compilation of C++/Python bindings, manage dependencies, and implement error detection mechanisms
- Fixed critical, non-deterministic memory leak crashes in the C++ driver program

Tapway

Selangor, Malaysia

AI Engineer (MLOps) Intern || Tech Stack: Angular, TypeScript, Python, Docker, AWS

May 2023 – August 2023

- Maintained and optimized a microservices backend for an ML model training and analytics web app by optimizing the training and auto-labeling pipelines while leveraging AWS and ML model libraries
- Integrated two post-processing stages in the training pipeline to handle ML model exports and data uploads
- Deployed an image auto-labeling model on a serverless GPU (RunPod), enabling single-inference use cases
- Engineered a client-side data validation and analysis module in Typescript for YOLO format datasets and optimized the COCO format version to reduce runtime on a 1.3GB dataset by 96% (17s to 0.7s)

PROJECTS

MapReduce Framework

Ann Arbor, MI

Tech Stack: Python (threading, socket, subprocess, click, etc.), Bash

April 2024

- Implemented a multi-process, multi-threaded, fault-tolerant server in Python to execute MapReduce jobs
- Utilized TCP/UDP sockets for robust inter-process communication and fault tolerance

deTrash (HackOHIO – 2nd place ENGIE Sponsor Challenge)

Columbus, OH

Tech Stack: Python, Docker, Flask, AWS, Sveltekit, TypeScript, HTML, CSS, Vercel

October 2023

- Designed a Dockerized Flask backend for a web app to identify litter from images, store geolocation data using AWS DynamoDB, and provide up-to-date recycling suggestions following state laws
- Leveraged AI tools like YOLOv5 and LangChain for object detection and text generation respectively

Let's Cook! (HackGT X – 1st place in Sustainability Track)

Atlanta, GA

Tech Stack: Python, Docker, RunPod, TypeScript, Next.js, Tailwind CSS, Vercel

October 2023

- Deployed a Dockerized microservices backend for an AI-powered recipe suggestion web app on a serverless GPU
- Utilized YOLOv8 for ingredient identification and wrote custom data processing scripts for filtering over 300,000 recipes in under 2 seconds