Jun Kit Lim

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

EDUCATION

University of Michigan (College of Engineering) **Ann Arbor, MI**
BSE Computer Science || Minor in Mathematics *August 2022 – Present*

- ***CGPA:*** 3.98, ***Major CGPA:*** 4.0
- ***Coursework:*** Parallel Computing Architecture, Computer Networks, Intro to Machine Learning, Distributed Systems, Operating Systems, Parallel GPU programming, Web Systems, Computer Organization, Data Structures & Algorithms, Programming Paradigms, Foundations of CS, Combinatorics, Linear Algebra, Discrete Math

SKILLS

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

Technologies: Linux, Git, GitHub Actions, Docker, AWS (S3, EC2, DynamoDB, ECR, Amplify, Lambda, SQS), Flyte, React, Flask, CMake, CUDA, Jenkins

WORK EXPERIENCE

University of Michigan — CSE Dept. (AMD-Sponsored Research) **Ann Arbor, MI**
Research Assistant (Prof. Narayanasamy's Lab) || Tech Stack: C/C++, CUDA, Make *January 2025 – Present*

- Accelerating Minimap2 by designing multithreaded pipelines interfacing with GPU kernels
- Migrating core library components from C to C++ to improve memory management and readability
- Restructuring memory layout to enable easy batching and coalesced access on GPUs

Optiver US LLC **Chicago, IL**
SWE Intern || Tech Stack: C/C++, CMake, Python, Jenkins *June 2025 – August 2025*

- Enhanced a network traffic monitoring app used across 17+ exchanges to decode and write order/trade data for compliance reporting by implementing two-tier session-level filtering, enabling cancel-on-behalf handling for CME, laying groundwork for multi-entity output per instance, and developing a timezone-aware utility class
- Integrated the ICU library into a trading and monitoring monorepo by adding pinned builds for AlmaLinux 9 and CentOS 7, creating reusable CMake modules, and resolving CI issues with custom Jenkinsfile scripts
- Developed unit and integration tests using both an in-house framework and GoogleTest; all code deployed and running in production

Keysight Technologies **Penang, Malaysia**
R&D SWE Intern || Tech Stack: Python, C/C++, CMake, Bash, Makefile *May 2024 – July 2024*

- Built a Python GUI for displaying real-time instrument data featuring AI-driven navigation and analysis features
- Automated C++/Python binding builds using Bash, Makefiles, and CMake, streamlining compilation, dependency management, and error detection

Tapway **Selangor, Malaysia**
AI Engineer (MLOps) Intern || Tech Stack: TypeScript, Python, Docker, AWS *May 2023 – August 2023*

- Maintained a scalable microservices backend for an ML training and analytics app, enhancing auto-labeling and training workflows through AWS services and ML tooling
- Added two post-processing stages into the training pipeline to handle model exports and dataset uploads
- Deployed an image auto-labeling model on a serverless GPU (RunPod) for on-demand inference
- Implemented a client-side data validation module for YOLO-format datasets in TypeScript and optimized COCO-format analysis, reducing runtime on a 1.3GB dataset by 96% (17s → 0.7s)

PROJECTS

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*

- Launched a Dockerized microservices backend for AI recipe app on serverless GPU; used YOLOv8 for ingredient detection and optimized filtering of 300K+ recipes in under 2 seconds