# Bin-Lun Li

# EDUCATION

## National Tsing Hua University (NTHU)

Sep 2021 - Jun 2025

B.S. in Computer Science Advisor: **Jerry Chou** 

Average **GPA 4.2/4.3** on last 4 semesters.

# SKILLS

Languages

Programming Languages

C/C++, Python, Verilog, Go

Tools & Libraries

Git, Unix-like shells, Docker, Kubernetes, CUDA, MPI, OpenMP, Triton

TOEIC Listening and Reading Test 915/990

# EXPERIENCE

#### Machine Learning Engineer Intern - Lasertec Taiwan

Dec 2024 - Present

Pytorch/Triton/CUDA/Linux

- Achieved up to 297x speedup in morphological operations using parallel programming.
- Developed **production-grade GPU software** tailored for industrial applications.

#### Teaching Assistant, National Tsing Hua University

Operating System/Hardware Design

- Operating Systems Authored specifications for Operating System implementations.
- Hardware Design and Lab Drafted specifications for hardware design projects

#### President of Student Association of Dept. of CS, NTHU

Sep 2022 - Aug 2023

Leadership/Communication

• Led a team of 10 people, collaborated with faculty, industry professionals, and student groups.

#### Awards

## Second Prize - 2024 Meichu Hackathon

Link to Project

Python/Flask/Backend/LLM

- Achieved 2nd place out of 230 contestants, first prize in Logitech group.
- Multi-agents chatroom, where each agent embodies a distinct personality, enabling dynamic interactions and valuable insights through conversations.
- Containerized the backend, ensuring consistent deployment across different environments.

#### Projects

#### Scalable LLM Inference Serving System

Go/Kubernetes/Prometheus/Grafana/GPU sharing/System Design

- Leveraged GPU sharing technique to allocate resources, resolved GPU underutilization issue.
- Implemented dynamic resource allocation strategies based on LLM inference workload analysis.
- Real-time monitoring with Prometheus and Grafana to visualize resource consumption.

#### **All-Pairs Shortest Path**

C/C++/CUDA/Parallel Programming

- Optimized both SRAM and host memory access using **parallel programming** techniques.
- Achieved 10th place out of 110 contestants in the course competition.

#### Robotic Arm Color Classification

Link to Demo

Verilog/Hardware Design/FPGA

• Design novel hardware architecture which leverage hydraulic pressure to operate a robotic arm.