# 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.

Teaching Assistant of "Operating Systems" and "Hardward Design and Lab".

# SKILLS

Programming Languages C

C/C++, Python, Verilog, Go

Tools & Libraries

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

Languages Chinese: Native, English: Fluent (TOEIC 915)

## EXPERIENCE

### Machine Learning Engineer Intern - Lasertec Taiwan

Dec 2024 - Present

PyTorch/Triton/CUDA/Nsight Systems/Linux

- Accelerated morphological operations from CPU to GPU, achieving a 297x speedup by leveraging PyTorch for initial parallelization and Triton for custom kernel optimization.
- Profiled performance bottlenecks using Nsight Systems, identifying and resolving inefficiencies in GPU computation.
- Integrated optimized pipelines into a production-grade GPU software system, enabling deployment for industrial applications.

# President of Computer Science Student Association - NTHU

Sep 2022 - Aug 2023

Leadership/Communication

- Led a team of 10 people, collaborated with faculty, industry professionals, and student groups.
- Organized technical workshops, introducing 50+ students to tools like Git, Docker, and LaTeX, fostering early adoption of industry-standard technologies.

### AWARDS

#### First Prize - 2025 AWS AIWave Hackathon

AWS Cloud/Python/LLM/Jetson

- Led the design and implementation of an edge-cloud hybrid system to tackle healthcare information disparity in hospitals.
- Integrated NVIDIA Jetson edge devices with AWS cloud services for scalable, robust deployment.

### 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.
- Delivered a 59% reduction in mean token processing time by optimizing inference throughput and resource utilization.