

maclin726@gmail.com

EDUCATION

M.S. (2024), Department of Computer Science and Information Engineering, National Taiwan University, Taiwan

- Advisor: [Chih-Jen Lin](#); Overall GPA: 4.21/4.3.
- Our research group develops and maintains useful machine learning packages such as [LIBSVM](#) (more than **55k** citations), [LIBLINEAR](#) (more than **10k** citations) and [LibMultiLabel](#).

B.S. (2022), Department of Computer Science and Information Engineering, National Taiwan University, Taiwan

- Overall GPA: 4.2/4.3; Major GPA (CS-related): 4.24/4.30; Rank: 4/140 (3%).
- Selected taken course: Machine Learning, Convex Optimization, Information Retrieval, Information Theory, Compilers, Cryptography and Network Security.

SELECTED RESEARCH/PROJECT WORKS

SparseKmeans: High-Performance Clustering on Sparse Data

- Developed a high-performance K-means implementation using GraphBLAS for sparse matrix operations, **achieving up to 10x speedup** over scikit-learn on sparse data. [\[CIKM '25\]](#)

LibMultiLabel: Scalable Extreme Multi-Label Classification (XMC)

- Optimized the model storage for millions of labels, **reducing space requirements by up to 90%**. [EMNLP '24]
- Developed a dual-based weight recalculation strategy that **reduces model size by up to 50%** on large-scale datasets without loss of accuracy. [Accepted by AISTATS '26]

Deep Learning Systems & GPU Acceleration: Led student research as a TA for the *Optimization and Deep Learning* course:

- Automatic Differentiation Theory: Authored a technical guide explaining the implementation of autodiff systems. [\[Technical Report\]](#)
- GPU Kernel Optimization: Designed a project benchmarking GEMM kernels, focusing on memory coalescing, shared memory usage, and warp occupancy to identify bottlenecks. [\[Project Slides\]](#)

WORKING EXPERIENCES

Research Assistant, Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), UAE

Sept. 2024 – Sept. 2025

Quantitative Research Intern, WorldQuant, Taiwan

Aug. 2022 – Mar. 2023

- Applied graph learning to dig out hidden relations among companies for alpha seeking. In the end, we built a new relation data set achieving low correlation with existing ones.

Teaching Assistant, National Taiwan University

Spring 2020 – Spring 2024

- I was TA for courses including Data Structure and Algorithms (with a top 15% **Excellent TA Award**), Optimization Methods for Deep Learning, Theory of Computation (Automata), Linear Algebra, and Calculus.

SKILLS

Python (scikit-learn, numpy, scipy, PyTorch), C/C++, CUDA, L^AT_EX, Git/Github, Shell Script, Linux Command Line Interface, Slurm.

EXTRACURRICULAR ACTIVITIES

Director, Student Association of Computer Science and Information Engineering

Aug. 2020 - Jul. 2021

(Member in the Academic Department from Aug. 2019 – Jul. 2020)

- Led 50 students to host academic events and extracurricular activities for hundreds of students in the department.
- Gave tutorials on Python programming in the CSIE Camp (100+ members).
- Hosted a freshman programming competition and gave tutorials on basic Linux commands.