Personal Particular

Ming-Yi Lai (Melson Lai) Name:

Gender: Male Date of Birth: 1997/08 Nationality: Taiwan Conscription Status: Served

Language: Mandarin, English (TOEFL iBT 104)

Programming Skill

Programming Languages: C/C++, Bash, Python, Go, Perl **Development Tools:** GNU Linux, Docker, GDB

Contact Information

ming-yi.lai [at] mymlai.com Email:

Education

M.Eng in Computer Science

2019/07-2021/07

National Tsing Hua University

Hsinchu, Taiwan

- + Thesis: Accelerate Mobile Machine Learning Inferences with Combination of Machine Learning Runtimes
- + Advisor: Prof. Jeng-Kuen Lee

B.Eng in Computer Science

2015/09-2019/06

National Tsing Hua University

Hsinchu, Taiwan

Senior High School Tainan First Senior High School 2012/09-2015/06 Tainan, Taiwan

Working Experience

2021/09-2023/05 Synology

Product Developer

Taipei, Taiwan

- + Design highly efficient software systems using multithread & multiprocess in C++
- + Develop customized file systems using the VFS layer in Linux kernel
- + Deliver cloud backend services with Go, gRPC, Redis, TiDB, etc.

PeakHills Group 2021/04-2021/08 Engineer Hsinchu, Taiwan

+ Customize TVM AI compiler & runtime

+ Add VeriSilicon TIM-VX support to TVM

MediaTek
Internship

2020/07-2020/08
Hsinchu, Taiwan

+ Enable MLIR codegen for TVM utilizing Tensor IR

ITRI CITC
Internship

2017/07-2018/05
Hsinchu, Taiwan

+ Study how to perform distributed deep learning training

+ Study the performance factor of distributed deep learning frameworks (TensorFlow, PyTorch)

Research and Project

Enabling Android NNAPI Flow for TVM Runtime

2020/08

Ming-Yi Lai, Chia-Yu Sung, Jenq-Kuen Lee, and Ming-Yu Hung

(Virtual Conference)

- + Published in ICPP EMS 2020
- + Devise algorithm to partition machine learning models to TVM/NNAPI AI compiler & runtime
- + Convert TVM Relay IR to NNAPI equivalence

Deep Learning Cloud Service

2017/07-2018/07

NTHU CS Bachelor Final Year Project

Hsinchu, Taiwan

- + Use OpenStack Horizon (Django) to create a WebUI
- + Incorporate OpenStack Swift, PostgreSQL, Kubernetes and TensorFlow as backend to enable semi-automatic deep learning training and inference

Taiwan Student Cluster Competition

2017/03-09

NTHU Delegation Member

Hsinchu, Taiwan

- + Win the second prize with significant edge over other competitors
- + Compile hardware-specific distributed software
- + Automate competition process with Bash and Python scripts

School Experience

Teaching Assistant of Compiler Design

2021/03-2021/06 2020/03-2020/06

National Tsing Hua University

Hsinchu, Taiwan

+ Hands-on with Lex and Yacc

Study Abroad: Undergraduate Exchange

2018/08-2019/05

Nanyang Technological University

Singapore

Job Expectation / Preference

Date of Availability

Anytime

Preferred Location

Hsinchu, Taiwan