Education

National Cheng Kung University

B.S., Political Science

Sep. 2015 - May. 2017

Taiwan

Seoul National University

B.S., Computer Science and Engineering

Sep. 2019 - Mar. 2023(Expected)

Work Experience

PLCT Lab

Chinese Academy of Science

Intern

May. 2020 - Nov. 2020

- Emulated 32-bit RISC-V SoCs on QEMU supporting a customised interrupt controller and registers.

Google Summer of Code

Apache Software Foundation

Intern

Jun. 2019 - Sep. 2019

- Engineered Apache Nemo to process single-stage batch data with AWS Lambda Functions.

Software Platform Lab

Seoul National University

Research Intern

Mar. 2019 - Nov. 2019

- Part of a team working to enable distributed dataflow system to benefit from serverless computing using AWS Lambda Functions, Java and Apache Nemo.

SUSE

Beijing, China

Intern

Oct. 2018 - Jan. 2019

Part of the QA team working on openSUSE and SUSE Linux Enterprise, with git and openQA

Publications

- A third-author paper rejected by EuroSys 2020
 - A hyrbid system for dealing with bursty input rates in stream processing applications, which dynamically creates VMs and serverless containers.
 - Actively participated in paper writing, research experiments and evaluation, algorithm design regarding VM scaling, and engineering the dataflow framework.

Serverless Computing: Pitfalls and Solutions

Korean Computer Congress 2019

First Author

Lambda Executor: extend Apache Nemo with serverless functions

Korean Software Congress 2019

First Author

Misc

Skills: C, Java, x86 Assembly, AWS Lambda Functions, Binary Exploitation, Matlab

Languages: Proficient in Chinese, English (TOEFL 100), Japanese (JLPT N1) and Korean

courses: Compiler, Operating System, GaTech cs6265(Introduction to Computer Security)