

**Gao Zhiyuan**

+82 1059223511  
alapha23@gmail.com

## Education

**National Cheng Kung University**

*B.S., Political Science*

Taiwan

*Sep. 2015 - May. 2017*

**Seoul National University**

*B.S., Computer Science and Engineering*

Korea

*Sep. 2019 - Jul. 2023(Expected)*

## Work Experience

**Alibaba Cloud**

*Summer of Code Intern*

*Jun. 2021 - Sep. 2021*

Developed devsapp/start-puppeteer, fc-info unit test and integration tests, an api to check runtime version in fc-common and Git workflow automation with Typescript, Jest and Github workflow.

**PLCT Lab**

*Intern*

Chinese Academy of Science

*May. 2020 - Nov. 2020*

Participated in the patch to QEMU upstream to emulate Nuclei RISC-V SoCs with customised interrupt controllers and registers.

**Google Summer of Code**

*Intern*

Apache Software Foundation

*Jun. 2019 - Sep. 2019*

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

**Software Platform Lab**

*Research Intern*

Seoul National University

*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**

*Intern*

Beijing, China

*Oct. 2018 - Jan. 2019*

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

## Publications

**Unname paper, publication pending**

A hybrid 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*

**Skills:** C, Java, Python, AWS Lambda Functions, Binary Exploitation, Git, x86 Assembly

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