Gao Zhiyuan

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Education

National Cheng Kung University   Taiwan
B.S., Political Science   *Sep. 2015 - May. 2017*
Seoul National University   Korea
B.S., Computer Science and Engineering   *Sep. 2019 - Jul. 2023(Expected)*

Work Experience

MetaMUI-SovereignWallet
Python SDK Intern   *Dec. 2021 - Now*
Implementing Python SDK for MetaMUI blockchain built with Substrate framework.

Serverless Devs at 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   Chinese Academy of Science
Intern   *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   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 Dev&QA team working on openSUSE and SUSE Linux Enterprise, with git, openQA and perl.

Publications

Unname paper, publication pending
A hyrbid system for dealing with input spikes in stream processing applications, which dynamically creates and coordinates containers and serverless functions.
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, Docker, Binary Exploitation, Git, x86 Assembly

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