Jia-Jun Yeh

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Jia-Jun is a highly skilled software engineer specializing in C++ and Go programming. He worked at Taipei Exchange, then became a senior developer at a blockchain startup and eventually led a cryptocurrency exchange team. Currently, Jia-Jun is the Chief Technology Officer at Stranity Technology Co., Ltd. and has led the development of a scalable backend infrastructure using cutting-edge technologies such as Golang, Kubernetes, and clean architecture.

Work Experience

Jan 2021-Present **Stranity Technology Co., Ltd.** *Chief Technology Officer*

The company is a spin-off of Sky Mirror Technology Co., Ltd.

- Utilized technologies such as monorepo and clean architecture to support backend development at a scale exceeding 100,000 lines of code.
- Developed an automatic Swagger API documentation generator tool for the Gin Framework (Golang) to reduce the cost of communication and documentation maintenance between the frontend and backend teams.
- Designed and developed a strategy subscription and trading platform targeting low latency and high concurrency. Based on a self-managed Kubernetes cluster.
- Deployed and Maintained self-managed high-availability Kubernetes cluster, OS, and network infrastructure.
- Researched and applied low-latency trading technology to the order gateway system written in C++. (Solarflare and Mellanox kernel bypass library, kernel tuning, CPU microarchitecture)
- Expanded development team to seven members, led two C++ system engineers in developing an order gateway system, led two backend engineers and two frontend engineers in developing a back office system, and trained one SRE to master Kubernetes management to handle company system maintenance.

July 2019-Jan 2021 **Sky Mirror Technology Co., Ltd.** *VP of Engineering*

Futures trading system development.

- Optimized the trading system to achieve microsecond trading speed by selecting the best data structure and redesigning the process execution flow.
- Redesigned core component from MVC to Layered Architecture to improve maintainability and testability.
- Implemented gRPC plugin that could call RPC in a single process to reduce network latency or avoid context switching.
- Investigated several production accidents. e.g., MySQL transaction deadlock issue, unexpected process crashing, L2/L3 network connectivity. Also wrote the corresponding postmortem.
- As a team manager, recruited two backend engineers and one frontend engineer, and collaborated on developing system management and customer dashboard projects.

June 2018-May 2019 **COBINHOOD, Ltd.** *Lead Backend developer*

Cryptocurrency exchange development.

- Streamlined Kubernetes deployment configuration to reduce monthly cost by over USD 10,000 on the Google Cloud Platform.
- Designed a new coin holder reward point system to reduce 99% of computing resources.
- Implemented the Go version client library to integrate two blockchains (Monero, Tezos) in exchange.
- Improved testing with database/cache tuning to speed up 300%.
- Led a team of five engineers in developing and maintaining a backend system for a cryptocurrency exchange.

June 2017-June 2018 **Taipei Exchange** *Software Engineer*

Development of an emerging stock trading system.

- Developed message dispatch proxy to adapt the trading system to web service.
- Optimized continuous data streaming system to be 110 times faster and solved critical race condition problems. And developed a drop-in replacement for it based on libuv.

Education

2015-2017 **MSc, Institute of Computer Science and Engineering** National Chiao Tung University
2011-2015 **BSc, Computer Science** National Taichung University of Education