

Jia-Jun Yeh

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Jia-Jun is a professional software engineer specializing in C++ and Go. He first worked for Taipei Exchange, where he had experience in the classical financial system. After that, he joined a blockchain startup as a senior developer and became the team leader in charge of cryptocurrency exchange. Now to build competitive products, he is bringing cutting-edge technology to FinTech startups.

Work Experience

Jan 2021- **Stranrity Technology Co., Ltd.** *Chief Technology Officer*
Present spin-off

- Designed a Golang monorepo for the backend team and introduced clean architecture.
- Developed an automatic Swagger API documentation generator tool for Gin Framework (Golang).
- 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.
- Developed trading system components using Modern C++ (boost, TBB)
- Researched and applied low-latency trading technology to products. (Solarflare and Mellanox kernel bypass library, kernel tuning, CPU microarchitecture, cache-friendly programming, lock-free and wait-free data structures)
- Expanded development team to seven members, led two C++ system engineers in developing a risk management middleware system, led two backend engineers and three frontend engineers in developing a CRM website system, and trained one SRE to master Kubernetes management to handle company system maintenance.

July 2019- **Sky Mirror Technology Co., Ltd.** *VP of Engineering*
Jan 2021 Futures trading system development using C++17.

- 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- **COBINHOOD, Ltd.** *Lead Backend developer*
May 2019 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.
- Participated as an interviewer in six job interviews for management roles.

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

June 2018 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