Javier Phon Zhee Kai

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Additional links: Personal Website | GitHub | LinkedIn

EDUCATION

National University of Singapore (NUS)　　　　　2020 – 2024
- Bachelor of Computing (Computer Science) With Honours
- Grade: First Class Honours (Highest Distinction), GPA: 4.54 / 5
- NUS Merit Scholarship

Hwa Chong Institution　　　　　2016 – 2017
- Achieved 88.75RP for GCE 'A' Levels
- Distinctions in H2 Mathematics, Economics, Physics and Chemistry

WORK EXPERIENCES

WorldQuant

Quantitative Developer, Macro　　　　　Jun 2025 – Present
- Built and maintained trading/research tooling for Quant Macro portfolio managers and researchers, including APIs, analytics libraries, data pipelines, monitoring scripts, and visualization utilities to accelerate alpha development and support live trading operations.
- Led end-to-end development of **Alpha Analyzer**, a production-grade alpha visualization, analysis, and comparison tool supporting single-alpha deep dives, multi-alpha benchmarking, and instrument-level breakdowns; took ownership of the project within one month of joining and served as the primary developer and maintainer through production rollout.
- Improved intraday tick data access performance by **10x** by designing and implementing a caching layer with a background daemon to stream live time-series updates into an internal cache storage, significantly reducing repeated database reads.
- Developed a consolidated **global macro event calendar service** by integrating multiple internal and external datasets into a centralized platform, enabling researchers to enhance alpha signals and improve volatility forecasting, volume modeling, and portfolio construction.
- Collaborated closely with portfolio managers and researchers to translate trading/research requirements into scalable production-ready systems, supporting both alpha research and live trading operations.

Coinhako

Software Engineer II, Trading Desk　　　　　Jul 2024 – Jun 2025
Software Engineer I, Trading Desk　　　　　Jan 2024 – Jun 2024
Software Engineer Intern, Trading Desk　　　　　May 2023 – Dec 2023
- **Led the development of a comprehensive risk management system**: Heavily involved in system design, development, testing, deployment, and integration of various major crypto exchanges into the risk management system, ensuring robust risk controls for the trading team.
- **Enhanced monitoring and visibility**: Integrated telemetry services such as Datadog and Sentry, enabling real-time metrics collection and error tracking, with automated Slack notifications for trading desk services.
- **Boosted test coverage**: Increased test coverage of trading-desk services by up to 50%, significantly improving reliability and reducing potential downtime.
- **Developed both public and internal APIs**: Built and thoroughly tested APIs for public data retrieval and internal trading use, ensuring seamless access to critical market information and trading functionalities.
- **Published essential trading libraries**: Created and maintained libraries, including a FIX protocol decoder, that are heavily utilized by the trading team for efficient data processing and automation.

- **Automated trading processes**: Streamlined and automated key trading operations, improving efficiency and reducing manual workloads for the trading team.
- **Managed cloud infrastructure**: Maintained and optimized AWS cloud infrastructure for trading desk services and trader tools using Terraform, ensuring high availability and scalability.

National University of Singapore
Teaching Assistant (Software Engineering)   Jan 2022 – Dec 2023
- Teaching Assistant for a software engineering course, CS2103/T, at NUS during the following academic periods:
  - AY23/24 Sem 1 (Aug 2023 – Dec 2023)
  - AY22/23 Sem 2 (Jan 2023 – May 2023)
  - AY21/22 Sem 2 (Jan 2022 – May 2022)
- Tutored students on software engineering principles, concepts, and practices.
- Graded student's practical exams.
- Provided feedback and clarified any doubts students may have with topics taught in the course.

Success IT Consultancy & Services
Software Engineer Intern   May 2022 – Jul 2022
- Built, deployed and maintained both the frontend and backend of the company's new SAAS product.
- Spearheaded the backend development and overall design for the master control app of the company's new SAAS product.
- Developed the company's backend services with Azure, which includes writing and deploying Azure functions, using Azure Databases and SQL to interact with databases and using Azure DevOps to write pipelines to deploy static web apps and functions.
- Redesigned, refactored and developed the company's Authentication API and other backend services, to make them more secure, versatile and flexible in supporting more of the company's products.

Powerhouse AI
Software Engineer Intern   Dec 2021 – May 2022
- Designed, developed, and maintained several new features as well as the UI of the application.
- Integrated the application's frontend and backend together with RESTful APIs.
- Set up Firebase (Google) analytics and crash analytics for the application.
- Utilised Google BigQuery and Google Cloud Platform (GCP) to generate and automate business intelligence reports for the company and clients.
- Ensured that the application is of the best possible performance, quality, and responsiveness.
- Identified bottlenecks and fixed bugs in the application.
- Maintained code quality, organisation, and automatization of the application.

SKILLS AND PROFICIENCIES

Languages:
- Proficient: Java, Python, Go, SQL
- Intermediate: JavaScript, Typescript, C, C++, C#, Ruby

Frameworks/Libraries/Tools:
- Proficient: Docker, Kubernetes, ArgoCD, Sentry, Datadog, Terraform
- Intermediate: Express, Flask, Angular, Expo, React, Next.js

Cloud Technologies:
- Amazon Web Services: AWS Elastic Compute Cloud (EC2), Relational Database Service (RDS), Elastic Kubernetes Service (EKS), S3, Lambda

- Google Cloud Platform: BigQuery, Firebase, Google Maps Platform, Google Analytics