Eric Yap Wei Lok

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SUMMARY
- B. Eng graduate with a strong academic background in Software Engineering
- Working experience with Golang, as well as technical interface designs, system architecture etc.
- Self-directed and able to think through problems, learn new technologies quickly

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EDUCATION
Singapore University of Technology & Design (SUTD) | May. 2016 – Dec. 2019 | Singapore

Bachelor of Engineering, Information Systems Technology and Design
- Relevant courses: Software Engineering, Networking, Cybersecurity, Machine Learning, Blockchain

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WORK EXPERIENCE
Shopee | Feb. 2020 – Present | Singapore

Senior Software Engineer (Jan 2022 - Present)
- Worked on tipping subsystem that enables buyers to tip delivery drivers
  - Resolved issue that prevented tens of thousands SGD from reaching delivery drivers
- Designed new refund entity microservice, and developed business features
  - Lowered latency of refund creation from >800ms to <200ms
  - Designed event-driven systems and transactional outbox framework to enable high consistency and high downstream messaging throughput
- Migrated payment initialization microservice with zero downtime, and developed business features
  - Designed gray-scaling and comparison mode for the migration to ensure correctness
- Designed and migrated order payment entities to payment microservice mentioned above
  - Designed new data models and new state machines for aforementioned entities
  - Coordinating large scale data migration of billions of records across multiple databases

Software Engineer (Feb. 2020 - Dec 2021)
- Designed new microservice for the consolidation and serving of order detail information with 1000s of QPS, and developed multiple important business features
  - Lowered latency from >1s to <600ms using Go concurrency patterns for multi-API fetching
- Designed asynchronous system for automatic cancellation of unfulfilled orders
  - Lowered processing times of cancellation from >14 hours to max 2 hours
- Migrated service that coordinates changing of order payment method

Continental Automotive | May. 2018 – Sep. 2018 | Singapore

Cybersecurity Research Intern
- Researched on automotive electrical control unit (ECU) bootloader security and developed PoC
- Proposed new ECU secure boot protocol, which was patented by the company

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TECHNICAL SKILLS
Professional: Go, Python, GRPC, MySQL, ElasticSearch, Redis, Kafka, Gitlab CI, Git, Docker, Prometheus, Grafana, Technical Design, Microservices

Hobbyist: Rust, TypeScript, Svelte, TailwindCSS, Solidity, Blockchain, Cryptography