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I build systems that stay correct when things go wrong, and I build AI agents the same way: with contracts, budgets and an audit trail. Two years of Go on a multi-tenant B2B platform (~20 microservices, ~100K end users); outside work, a multi-agent research system on Claude and Codex. Most of my code ships through AI coding agents. Singapore PR, no sponsorship needed; available immediately.

AI AGENT SYSTEMS

coreytrading – multi-agent operations system · Python · open source · ~121K lines · ~2,900 tests

- **Orchestration.** A host controller runs Claude and Codex as domain agents (technical, risk, valuation). Role, runtime and model are separate in a versioned routing config, so a role switches models without changing its contract.
- **Guardrails.** Agents get frozen, hashed evidence and must return schema-validated JSON, with no access to the workspace or the broker. A controlled writer applies changes after policy, freshness and revision checks, with receipts.
- **Reliability.** Cross-runtime independent review, explicit abstention, bounded follow-ups, and host-level budgets (concurrency and hourly call caps). Humans place every order.

AI-native delivery. Rebuilt an internal OpenProject-to-Slack tool in Go + Next.js with AI coding agents; this site’s writing, translation and publishing pipeline runs as Claude Code skills. [Writing on AI](#)

EXPERIENCE

GoCode Pte. Ltd. · Singapore Mar 2024 – Jun 2026
Golang Full Stack Developer (backend-focused)
Multi-tenant SaaS for consumer businesses in SE Asia: accounts, wallets, loyalty and partner networks. [Service write-ups](#)

- **Event-driven consistency.** Wrote **10 Kafka consumers across 5 services** for at-least-once delivery: manual ack, retry and dead-letter topics, idempotency keys enforced by unique indexes and carried into wallet transactions.
- **Fixed an out-of-memory failure** in a Kafka cascade over a 10-level partner network with top-down, keyset-paginated, throttled batches; migrated transaction limits from int64 to decimal.
- **Co-led the move from cron to Temporal:** payouts became parent workflows fanning out one child per tenant, with retry policies and compensation on failed credits.
- **MySQL and Redis.** Batched per-user aggregations into **UNION ALL** queries (500 users per round trip) across a **128-shard table** on a read replica; hardened the identity cache with singleflight and bounded async pools.
- **Platform foundations.** First versions of the identity and configuration services and most API-gateway middleware; designed the audit trail now used by **12 services**. Largest contributor to six services.

TikTok Pte. Ltd. · Singapore Nov 2023 – Dec 2023
Backend Development Intern, Storage Infrastructure

- Made a cross-region object-storage replication service runnable on a laptop by swapping its internal queue, MySQL and document DB for open-source equivalents via runtime function hooking; shipped it as a reusable Go library.

OPEN SOURCE

go-reliability-patterns · Go Log redaction, a fail-closed per-tenant rule engine and an idempotent at-least-once consumer, with tests, race checks, benchmarks and fuzzing.

SKILLS

Languages	Go (primary), Python, SQL, TypeScript
Data & messaging	MySQL (schema design, migrations, sharded queries), Redis, Kafka
Services	Microservices, gRPC / Protobuf, REST, go-zero, Gin, Temporal
AI & agents	Multi-agent orchestration, structured outputs, tool and permission boundaries, cross-model review; Claude Code, Codex
Operations	OpenTelemetry, Prometheus, pprof, Docker, GitLab CI, Kubernetes (working knowledge)

EDUCATION

Nanyang Technological University · M.Sc. Computer Control & Automation Aug 2022 – Jan 2024
South China University of Technology · B.Eng. Mechatronics Engineering Sep 2018 – Jul 2022
English (professional) · Mandarin (native)