# Benjamin Davis

### Backend and Blockchain Engineer



#### **PROFILE**

Backend Engineer with more than 4 years of practical experience, well-versed in leveraging **Go**, **Python**, **Javascript** and **Rust** to develop **robust backend** infrastructures, with proven skills in microservices development. Offers a specialist understanding of distributed systems management and **DevOps** practices implementation. Proficient in relational and **NoSQL** database design and optimization for data-driven applications.



#### PROFESSIONAL EXPERIENCE

October 2022 – August 2024 Hong Kong

#### ICO, Backend Developer(Remote) @

Laputa Technologies Limited is a professional IT consultancy offering mobile and web solutions, from substantial system development to minor application renovation.

(https://www.laputatech.com @)

- Created efficient RESTful APIs with JavaScript, Go, and Python for over five financial applications, ensuring high-performance under stress.
- Built a secure ERP backend with Express.js, utilizing JWTs, MongoDB, RESTful APIs, and microservices for optimal performance and security.
- Designed a hotel reservation system with CDN, API Gateway, and caching, improving concurrency and scalability using optimistic locking.

- Implemented a Redis-based rate limiter with Python and Node.js to control request flow and created distributed logging services with the ELK Stack.
- Employed AWS Lambda for automatic processing and transformation of data from S3 buckets, enabling real-time analytics.
   Migrated monolithic financial apps to a microservices architecture with Nest.js and Gin, enhancing modularity and scalability.
- Automated deployments using Jenkins and Ansible, enhancing pipeline efficiency and reducing release errors.

September 2021 – August 2022 Miami, US

#### CoinRoutes, Backend Engineer(Remote) ∂

CoinRoutes is a cryptocurrency trading platform that specializes in assisting traders with finding optimal execution prices across multiple exchanges. (https://www.coinroutes.com  $\mathscr{E}$ )

- Designed Go-based microservices to aggregate exchange data, relay information to the backend, and use Kafka as a message broker, deploying them on Amazon EKS for auto-scaling and load balancing.
- Developed a multi-threaded Rust WebSocket proxy server to manage and organize WebSocket subscriptions that pulls and serves data to the frontend, utilizing Rust's Tokio runtime and Axum web application framework.
- Contributed to the development and maintenance of the backend for the client-side SaaS product in Nest.js, providing a UI for trade operations.
- Refactored the orderbook implementation from Typescript to Rust for enhanced speed and memory management.
- Integrated APIs from several Coinbase, Binance, Kraken and Derbit for spot, future, and option trades, performing conformance testing with their technical teams.

September 2020 – July 2021

#### **Backend Developer (Freelancing)**

- Developed Golang based backends to trade stocks, futures, market.
- Developed Golang based microservices
- Developed Python based backends related AI (chatbot, prompt engineering)

 Developed web3 based backend and frontend for voting and betting.

#### **EDUCATION**

April 2016 - August 2020 Canadian College,

Vancouver, Canada Bachelor Degree in Computer Science ⊗

#### SKILLS

Programming Language: Golang, Python, Javascript, Typescript, Rust, C/C++

**Framework:** :Gin, Fiber, Beego, Gorilla, Axum, Actix, Rocket, FastAPI, Flask, Django, Express.js, Next.js

**Database:** PostgreSQL, MongoDB, Redis, DynamoDB, Cassandra, ElasticSearch

**Distributed System:** Kafka, RabbitMQ, Docker, Kubernetes

**DevOps:** Jenkins, Github Actions, Prometeus, Grafana

Blockchain: DeFi, Trading, Web3

Agile/Scrum Methodologies: JIRA

# English Chinese

## **♂** INTERESTS

**Sports** — Swimming | Basketball | Football

**Gaming** − Counter Strike | Dota v2.0 | Call of Duty