

Summary: Backend engineer with expertise in distributed systems and improving systems performance for high load.

Work Experience

Software Engineer - Go **Pvotal Technologies** **March 2024–Present**
Eagle Point, United States (remote)

Global Software Engineer Intern **HENNGE** **November 2023–December 2023**
Tokyo, Japan (onsite)

- Developed a Twitter clone using Golang, adhering to domain-driven design principles for a scalable and efficient solution.
- Leveraged DynamoDB for optimized data storage, implementing the single table design to ensure optimal performance.
- Leveraged auto-scaling features for efficient scaling based on demand.
- Orchestrated the entire infrastructure using Terraform, ensuring seamless integration of AWS services.
- Integrated a range of services, including DynamoDB, S3, ECR, ECS, ELB, Route 53, ACM, and IAM.
- Implemented robust DevOps practices to facilitate seamless integration and continuous delivery.

Software Engineer **Unimade Solutions** **August 2022–November 2023**
Finkit Project Beirut, Lebanon (onsite)

- Led the transformation of a Jira EPIC into a fully functional module, developing its architecture and maintaining up-to-date documentation to align with evolving client needs.
- Successfully integrated the system with trading platforms MT4/5 and Ctrader, meticulously documenting the integration procedures for future reference.
- Engineered a secure single-session login feature utilizing web sockets, ensuring exclusive user access within a browser.
- Implemented strategic optimizations for both database and code to improve system efficiency and performance.
- Led initiatives to enhance the overall system, introducing transformative improvements to elevate performance and reliability.

Education and Certifications

- **B.Sc. Computer Science**, Lebanese University, Lebanon. **2019–2022**
- Huawei, HCIA-Big Data v3.0 certification

Technologies and Languages

- Languages: Go, C#, JavaScript, Python, C, Java
- Technologies: MySQL, PostgreSQL, DynamoDB, ASP.NET, gRPC, WebSocket, Linux, Git, Jira, Docker, Kubernetes, Laravel
- Other: Data structures and algorithms, Object Oriented Principles, Design patterns, Distributed Systems

Projects

- **Dhangkanna** Distributed game built in Go uses gRPC for internal communication between servers with a gRPC load balancer that shifts reads to followers and writes to the leader, and a web socket to stream the game state to the front. It uses the Raft algorithm for consensus between servers. See the source on [Github](#).
- **Fafnir** Library written in Go works as a concurrent downloader for your app and supports queue-based downloading, each queue can be paused/resumed. I Applied the repository pattern, and while making it I learned valuable lessons on how to design a concurrent library in Go. See the source on [Github](#).
- **GoGive** is An API built with Go, PostgreSQL, Mailhog, and Docker. It uses a token-based authentication system and implements a rate-limiting algorithm to reduce spam. See the source on [Github](#).
- **Technical blogging** on dev.to/elkhatibomar currently at omarelkhatib.com, I blog about things that I find interesting.