Amanuel Assefa

Seoul • +82 10-6749-9788 • aman.siyum7@gmail.com • linkedin.com/in/amanuel-assefa-2b4574177 • https://github.com/amanuel1271

Backend developer

Backend Engineer with 3 years of experience designing real-time systems and fault-tolerant infrastructure. Built WebSocket services for 10K+ users, optimized PostgreSQL queries by 40% in 2023, and automated crypto transfers reducing workload 85%. Excited to apply this expertise to Al-powered platforms.

WORK EXPERIENCE

DNSEver Inc. / Probit Global Exchange • Seoul, South Korea • 09/2022 - Present

Backend Engineer

- Developed a subscription billing system for market maker accounts, delivering SaaS-style recurring payments and automated invoice tracking since January 2025.
- Architected BuyCrypto platform integrating with 10+ global providers, processing 10K+ monthly transactions with 99.8% success rate in 2023.
- Built scalable APIs using NestJS web framework and containerized services with Docker, orchestrated on Kubernetes for zerodowntime releases.
- Optimized PostgreSQL database schema optimizations and query analysis, reducing execution times by 40% within 6 months while analyzing and resolving performance bottlenecks.
- Delivered real-time WebSocket services and asset management system for trading data, supporting 10K+ concurrent users with sub-100ms latency and streaming 500+ messages/sec since 2022, with system usage tracking via Grafana and Datadog.
- Implemented comprehensive Jest unit tests with 90%+ code coverage across microservices, ensuring consistent debugging and reliable deployments.
- Collaborated with cross-functional teams including web frontend and application developers to deliver features with 99.9% uptime.

PROJECTS

TON Binary Options Pool Smart Contract • 07/2025 - Present

- Built Node.js backend API for FunC smart contract interaction with automated testing pipelines.
- Designed event-driven monitoring and settlement system with retry logic for fault tolerance.

SKILLS

Languages: C, JavaScript, Node.js, Python (working knowledge), TypeScript

Frameworks & Tools: gRPC, NestJS web framework, Redis pub/ sub & queues, REST APIs, WebSockets

Databases: PostgreSQL (schema design, query tuning), Redis (caching, messaging)

Infrastructure: AWS/GCP, CI/CD (GitLab), Datadog, Docker (containerization) , Grafana, Kubernetes

Systems: API integrations, Eventdriven architectures, real-time messaging, system usage tracking

EDUCATION

B.S. in Electrical Engineering, Minor in Computer Science

KAIST – Korea Advanced Institute of Science and Technology Daejeon, South Korea 08/2017 - 02/2022