

Dimitar Prodromov

Senior Backend Engineer // High-Load Systems

papica777@gmail.com

linkedin.com/in/dimitar-prodromov-1818b3399

github.com/qantum-fortres

qantum-fortres.github.io

Sofia, Bulgaria

*Senior Engineer with deep expertise in **High-Frequency data processing**, **Social Gaming/Betting platforms** (DraftKings), and resilient system architecture. While historically focused on C# and TypeScript/Node.js ecosystems, my core strength lies in designing **High-Load, Event-Driven Architectures** (using Websockets, Reactive patterns, and Docker Swarms) that scale to millions of users. Seeking to apply my domain knowledge of the gaming industry and complex concurrency to the Patrianna team.*

RELEVANT EXPERIENCE

Lead Backend Architect (HFT System) // QANTUM VORTEX (R&D)

2023 - Present

Multithreading

Event-Driven Architecture

WebSockets

Docker

PostgreSQL

ELK Stack

- Engineered a **High-Frequency Trading Engine** capable of processing 10,000+ market ticks per second using a custom multi-threaded worker architecture (conceptually similar to **Java's Reactor/Netty** model).
- Implemented persistent **WebSocket connections** to Binance/Bybit with automatic heartbeat monitoring, reconnection logic, and frame buffering (matching **Socket.io** patterns).
- Deployed the infrastructure using **Docker** containers, ensuring isolation and easy scaling of "Worker Drones".
- Optimized database interactions for high-throughput transactional data, ensuring data integrity during sub-millisecond arbitrage opportunities.

Senior Automation & Systems Engineer // DRAFTKINGS INC.

2021 - 2023

High-Load Systems

C# (.NET Core)

Kafka

Microservices

Observability

- Worked within the core engineering teams of a massive-scale **Sportsbook Platform**, dealing with traffic spikes of millions of concurrent users (Super Bowl / NBA Finals).
- Designed validation frameworks for **Microservices** that communicate via **Kafka**, ensuring message consistency and eventual consistency across the distributed system.
- Gained deep domain knowledge of **Social Gaming & Betting** lifecycles, wallet transactions, and regulatory compliance requirements.
- Utilized **Observability tools (Grafana/Prometheus/ELK)** to troubleshoot production bottlenecks and latency issues in the betting engine.

TECHNICAL ALIGNMENT

Backend & Concurrency

- **Multithreading:** Expert in designing race-condition-free concurrent systems.
- **High-Load:** Proven track record with systems handling massive TPS (Transactions Per Second).
- **Communication:** WebSockets, REST, gRPC, Message Queues (Kafka adaptation).

Infrastructure & DevOps

- **Containerization:** Docker, Docker Swarm logic.
- **Databases:** SQL (PostgreSQL), NoSQL adaptation.
- **Cloud:** Experience with Cloud-Native patterns (GCP/AWS adaptable).