

Dohyun Kim

Berlin, Germany | dohyun.k.july@gmail.com | dohyunkjuly.vercel.app | github.com/dohyunkjuly

EDUCATION

University of Europe for Applied Sciences

B.Sc. in Software Engineering; Grade: 97.28/100 (first 3 semesters)

Potsdam, Germany

Mar. 2025 – Feb. 2028 (Expected)

New York University, Gallatin School of Individualized Study

Undergraduate Coursework

New York, NY, USA

Sep. 2017 – May 2019

EXPERIENCE

Bitopex Trading Limited (<https://bitopex.io/>)

Software Engineer

Remote

Jun. 2024 – Jun. 2026

- Built an options backtesting engine (Black–Scholes, Deribit IV) for copy-trading products with **\$6M+ AUM**.
- Implemented Binance and OKX exchange connectors over **REST** and **WebSocket** APIs for real-time trading.
- Built a **FastAPI** service feeding backtest stats to risk controls that auto-disable underperforming strategies.
- Led system design for Rivermatch, a B2B marketplace matching merchants with payment acquirers, and built its MVP **CRM** in **NestJS** and **Next.js**, covering the full deal lifecycle with real-time messaging and notifications.
- Built the **Next.js** frontend for HypeRocket, a crypto yield platform with multi-tier referral payouts, in **11 languages** (i18next), with **Cloudflare** caching for DDoS protection.

Neonex (<https://www.neonex.team/>)

Software Engineer

Seoul, South Korea

Nov. 2023 – Jun. 2024

- Designed and implemented **Node.js** market-making bots using an asymmetric grid strategy, dynamically adjusting bid/ask spreads and volumes to mitigate inventory risk across **20+ spot** and **10+ futures** instruments.
- Developed ninjaxt, an open-source **NPM** library supporting REST and WebSocket APIs for trading.
- Built a **Next.js** dashboard for positions and inventory ratios, with CI/CD via **Docker** and **GitHub Actions**.

AlphaPortfolio

Co-founder

Seoul, South Korea

Feb. 2021 – Mar. 2023

- Raised \$20,000 from private investors and grew the fund to **\$60,000+**, drafting investment and partnership agreements and reporting regularly on performance and strategic adjustments.
- Built a quantitative strategy for undervalued KOSPI/KOSDAQ small caps using PBR, PER, PSR, EV/EBITDA.

PROJECTS

Crypto Exchange Platform | *Java, Spring Boot, Kafka, Next.js* | github.com/dohyunkjuly/crypto-exchange-platform

- Built an open-source, white-label crypto exchange as **Spring Boot** microservices over **Kafka**, with an in-memory matching engine that recovers from crashes via S3 snapshots and command replay.
- Achieved effectively-once processing over at-least-once delivery using a transactional outbox and idempotent consumers for settlement (MySQL ledger), market data (MongoDB), and real-time WebSocket feeds.
- Benchmarked **~4,200 orders/s** per engine end-to-end including the Kafka publish round trip; shipped copy trading, 7 order types, and an HMAC-signed public REST/WebSocket API.

AlphaCrypto | *Python, Backtesting* | github.com/dohyunkjuly/overfitting

- Maintain an open-source Python backtester for crypto futures, simulating liquidation, leverage, margin, and slippage.
- Deployed automated trading strategies with a **~100% annual return** (Aug. 2023 – Jun. 2024).

TECHNICAL SKILLS

Programming: TypeScript, JavaScript, Python, Java

Frameworks: Spring Boot, NestJS, Next.js, Node.js, React, FastAPI

Data & Messaging: PostgreSQL, MySQL, MongoDB, Redis, Kafka

DevOps & Cloud: AWS, Docker, GitHub Actions, Cloudflare

Languages: English (Fluent), Korean (Native)

MILITARY SERVICE

Republic of Korea Army | *Sergeant, Signaller (Mandatory Service)*

Sep. 2019 – May 2021