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Hungary

EXPERIENCE

Hungarian Startup University Program – University of Debrecen

Debrecen, Hungary

Software Developer Intern

Mar 2025 – Sep 2025

- Built a real-time chat backend using **JWT/OAuth2** and **WebSockets**, load-tested to **50 concurrent users** with stateless session handling designed for horizontal scalability.
- Introduced **Redis** caching for session management and frequent queries, reducing database query latency by **40%** and cutting round-trip time to **sub-50ms** under sustained concurrent traffic.
- Containerized the chat service with **Docker** across **2 environment-based profiles** (local, staging), cutting deployment setup time by **30%**.

Aid Global Foundation (NGO)

Remote

Backend Developer

Feb 2026 – Present

- Refactored a **TypeScript/Node.js** backend supporting **10k+ MAU**, decoupling monolithic logic into **modular services** to improve maintainability and independent deployability.
- Engineered **Supabase** integrations for media storage and campaign publishing, using parallelized execution to cut upload processing latency by **35%**.
- Built a fault-tolerant image processing pipeline handling **500+ monthly uploads**, reducing storage footprint by **30%** through automated compression while preserving full-fidelity content.
- Enforced **schema validation and data contracts** across **backend services**, eliminating a recurring class of data inconsistency bugs and reducing related production incidents.

PROJECTS

High-Performance RAG API (FastAPI, FAISS, Go)

Jul 2025 – Sep 2025

- Built a concurrent **FastAPI** backend with **FAISS** vector indexing, achieving **<200ms** semantic search latency across **700+ documents** with async request handling.
- Developed a concurrent file-based storage engine in **Go** with per-collection **mutex locking** and atomic writes, sustaining **zero data races** under concurrent access in load testing.

Distributed Job Queue Engine (Java, Spring Boot, Redis)

Jan 2026 – Mar 2026

- Architected a distributed job engine in **Java 17/Spring Boot** with priority queuing and **exactly-once execution** across **3 worker nodes** using **PostgreSQL advisory locks**.
- Engineered fault-tolerant lifecycle management with **exponential backoff retry**, dead-letter queue, and full audit logging, reducing failed-job recovery time by **40%**.
- Optimised throughput with **Redis caching** for queue metrics and **WebSocket push** for live status updates, cutting UI update latency to **under 100ms**; containerized with **Docker Compose** and automated via **GitHub Actions**.

OPEN SOURCE

- JReleaser** (Java, Maven): Fixed a JDK download timeout bug affecting **CI builds**, updating dependencies and propagating **readTimeout** configuration.
- OWASP VulnerableApp** (Java, Spring Boot): Fixed a clickjacking vulnerability and contributed **Docker-based** testing automation, cutting local dev setup time by 20%.

TECHNICAL SKILLS

Languages: Java (17/21), Python, TypeScript, SQL

Backend: Spring Boot, Spring Security, Hibernate/JPA, FastAPI, Node.js, REST APIs, WebSockets, Microservices

Databases: PostgreSQL, MySQL, Redis

Tools: Git, Maven, GitHub Actions (CI/CD), AWS, JUnit, Mockito

EDUCATION

University of Debrecen (Graduated)

Debrecen, Hungary

Bachelor of Science in Computer Science (GPA: 4.5/5.0)

Sept 2022 – Jan 2026

- Academic Honors:** Top 10% of cohort.

LANGUAGES

English (Fluent), Hindi (Native), French (Conversational), Hungarian (Conversational), German (Learning)