MIKHAIL SHYTSKO

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SUMMARY

Product-oriented backend developer with deep experience with Spring Boot and a passion for building scalable systems that solve real user problems. Adept at applying clean architecture and rapid iteration to achieve meaningful results. Focused on creating value, not just writing code.

WORK EXPERIENCE

Software Engineer, The Designery s.r.o.

Apr 2025 - Present

Project: Mental Health Platform

- Designed and built reactive backend applications on Spring WebFlux using Google Cloud Platform ecosystem.
- · Successfully implemented on-the-fly encrypted big data streaming.
- · Led the project development team, while also being an architect and DevOps specialist at the project.

Worked with: Spring Framework, Firestore, Firebase Auth, Cloud Functions, Docker, GitLab CI/CD

Software Engineer, VitSBS

May 2024 - Oct 2024

Project: Automated Certification System & Experimental IoT for Air Quality

- Built an equipment certification automation platform using **Spring Boot** and **PostgreSQL**, reducing accounting errors by **45**% and accelerating workflow by **30**% by eliminating manual processes.
- Integrated numpy via **GraalPy** into **Spring Boot** service to analyse product trends, increasing data processing speed by **25**% and accelerating decision making by the product team.
- Developed a modular audit library on Spring AOP, improving transaction traceability and reducing postprocessing time by 15% for certifications by region and hardware type.

Worked with: Spring Framework, PostgreSQL, MongoDB, ESP32, Tasmota, Paho MQTT, Vaadin, WebSockets, Spring AOP, Spring MQTT, GraalVM, iText, Docker, GitHub, GitHub Actions, Maven, Junit 5.

Backend Developer Intern, ArenaPizza

Oct 2023 - Mar 2024

Project: Order Management & Logistics Optimization

- Implemented a secure REST API on Spring Boot with OAuth2 and JWT, improving customer data security and compliance.
- Improved shift scheduling with feature-toggle, reducing update failures by 40% and simplifying in-store deployment.
- Developed a QR coupon system with **ZXing**, increasing customer engagement by **25**% and increasing promotional sales by **15**%, improving marketing effectiveness.

Worked with: Spring Framework, OAuth2, JWT, PostgreSQL, Redis, ZXing, GitHub, GitHub Actions, Maven, Mockito, Junit 5.

PROJECTS

JHMS | High-Performance JVM & System Monitoring API

Oct 2024 - Apr 2025

- Created a prototype API for monitoring JVM and system metrics using GraalVM, Project Loom and Project Panama, reducing memory and CPU consumption by 30% compared to peers.
- Eliminated performance bottlenecks by optimising **virtual threads** and **native calls**, making the solution applicable for **resource-intensive** systems.

Worked with: Java 23, GraalVM, Project Loom, Project Panama, Windows and Linux kernel functions, Java WebServer

Endor | IoT Platform for Energy Efficiency

Oct 2024 - Jan 2025

- Developed an **IoT** platform on **Spring Boot** and native **Kotlin** application for energy management, reducing energy costs by **15**% in pilot implementations.
- Implemented asynchronous communication via Spring WebFlux and MQTT, ensuring stability under uneven device load.
- Configured horizontal scaling with Docker and GitHub Actions, achieving high availability for critical system elements.

Worked with: Spring Boot, Netflix DGS, GraphQL, Paho MQTT, Spring WebFlux, PostgreSQL, Docker, GitHub Actions

EDUCATION AND ADDITIONAL INFORMATION

Technical University of Kosice, FEI, Informatics

Sep 2022 - Present

Personal achievements:

- Successfully participated in various hackathons with <u>Argon</u> team, including <u>Erste Digital 2024</u>, <u>GymBeam Data Hackathon</u> and <u>T-Systems Hackathon 2024</u>
- Founded project HackPN and successfully organised 2 hackathons at it offline one in the city of Piešťany and online one with <u>UpliftMedia</u> for Slovak and American Students.
- Was qualified for participation in UVP Startup Accelerator with project meetera
- Languages: Russian(native), Slovak(professional working proficiency), English(C1 level, IELTS Acedemic band 8.0, test report number **24SK501435SHYM005A**)