# Simon Mokrov | Backend Developer

Amsterdam, the Netherlands

## **CONTACTS**

+31 (06) 579-875-47

in linkedin.com/in/sem-wett

\$\Omega\$ +31 (06) 579 875 47

sem\_wett

github.com/semwett0301

**♦** gitlab.com/semen.mokrov

**△E** English | Russian | Dutch (A1)

# **ABOUT ME**

Backend Developer with almost 4 years of total experience designing and implementing scalable, high-performance server-side applications and APIs. Skilled in Java (Spring Boot, Java EE), NestJS, TypeScript, relational or non-relational database,s and Docker, with strong expertise in building secure, maintainable architectures and integrating complex systems.

**Professional experience** spans enterprise retail, EdTech, and banking software, delivering measurable improvements in system scalability, backend performance, and reliable feature delivery within Agile teams. Experienced in designing RESTful and event-driven architectures, implementing CI/CD pipelines, and optimizing data storage.

Holds a **Master's in Digital Driven Business** (AUAS, Amsterdam), with a focus on data-driven development, machine learning, and statistics. Passionate about building robust backend systems, improving system performance, and contributing to reliable, scalable software solutions.

# **BACKEND EXPERIENCE (≈ 4 YEARS)**

## 1. Backend Developer

July 2024 - Feb 2025

**ITMO University** – Banking software for Gazprombank

Enhanced internal systems for bank guarantees, optimizing backend workflows and enterprise data processing.

Tech stack: Java, Kotlin, Spring Boot, Gradle, PostgreSQL, Kafka, SOAP, Docker

- Reduced average response latency by 12% via endpoint refactoring.
- Improved PostgreSQL query execution by up to 20%.
- Cut report build time from 90s to 60s.
- Lowered server load by 20% after migrating to Kafka.

## 2. Full Stack Developer (Backend-focused)

Nov 2023 - Apr 2024

**Tune IT** — EdTech solutions

Developed and maintained the Skillfactory educational platform and the Polytech introduction system, focusing on backend scalability and modularity.

Tech stack: Spring Cloud, Java, Kotlin, PostgreSQL, Redis, React, TypeScript, RTK Query, Docker

- Resolved 30+ issues, improving system stability.
- Reduced design-to-development cycle by 25% with improved backend APIs.
- Cut service latency by 13% through modularization with Spring Cloud.

#### 3. Full Stack Developer (Backend-focused)

Mar 2023 - Nov 2023

MagicGophers – Social apps for VK (largest social network in Russia)

Built backend services and APIs for VK mini-apps, ensuring performance, scalability, and data consistency.

Tech stack: NestJS, PostgreSQL, Redis, React, VK API, Docker

- Delivered apps adopted by 10,000+ users.
- Reduced bug reports by 30% within 6 months.
- Optimized DB queries, reducing latency by 25%.

#### 4. Backend Developer (Internship)

Jan 2022 - Jun 2022

ITMO University — EdTex (OpenEdu - online learning platform)

Refactored a legacy Spring monolith (course update flow) and delivered a standalone certificate service.

Tech stack: Java, Spring (Spring Boot), Quarkus, Hibernate, Micrometer, PostgreSQL, MinIO, Docker

- Refactored the course update flow in the monolith, reducing median request latency by 8%.
- Built a Quarkus-based certificate service with Hibernate, decoupling issuance from the monolith and enabling independent scaling.
- Added Micrometer observability on a separate physical machine to expose production metrics for analysis and capacity planning.
- Containerized components with Docker; used MinIO for object storage.

## FRONTEND EXPERIENCE

## 1. Frontend Developer

March 2024 - Present

X5 Tech — Largest retail in Russia

Developed and supported subscription services ("Package", "Abonement") in a corporate, cross-functional environment.

Tech stack: React, TanStack Query, pnpm, Axios, Chart.js, Python & FastAPI (reading)

- Increased customer retention by 12% through frontend improvements.
- Reduced release time-to-market by 15% within 6 months.
- Reduced production issues by 18% after refactoring codebase.

2. Frontend Developer July 2022 - Mar 2023

ITMO University – EdTech (remote exam monitoring)

Redesigned frontend for ITMOproctor, improving scalability and user experience.

Tech stack: React, Redux, Vue.js, JavaScript, WebRTC, WebSockets, Axios

- Reduced time-to-market for new features by 20% through modular architecture.
- Decreased load times by 10% with optimized routing, state, and sockets.
- Enabled secure streaming for 5,000+ concurrent exams using WebRTC.

## RELATED EXPERIENCE

#### 1. Machine Learning Engineer, X5 Tech

Feb 2025 - Apr 2025

Tech stack: Python, pandas, scikit-learn, SHAP, XGBoost

Built a churn prediction model and a pricing simulation pipeline for subscriptions. Integrated results into dashboards and validated impact with A/B testing, supporting pricing optimization.

#### 2. Teaching Assistant, ITMO University

Sep 2022 - Feb 2023

Tech stack: Java, Spring Boot, PHP, JavaScript, React, Vue.js, Angular, HTML, CSS

Guided first-year students in programming and web development. Led Java sessions and mentored full-stack projects, enhancing technical and teaching skills.

3. CMS on FastAPI 2024

Tech stack: Python, FastAPI, PostgreSQL, Vue.Js, Vuex

Built a CMS in a contract team project with FastAPI and PostgreSQL. Delivered a scalable solution with authentication, data modeling, and a customized admin interface.

# **SKILLS**

Programming languages Java, Kotlin, TypeScript, JavaScript (ES6+), Python, C

Spring Boot (Data, Security, MVC, JTA, Reactive), Java EE, Quarkus, NestJS, FastAPI **Backend frameworks** 

Kafka, RabbitMQ, Amazon SQS, WebSockets, Server-Sent Events (SSE) Messaging

REST, GraphQL, gRPC, Swagger Networking

Monitoring Grafana, Prometheus, ELK Stack, Sentry, Micrometer

**Databases** PostgreSQL, MySQL, Oracle, MongoDB, Redis, Spring Data, Hibernate, TypeORM, MiniO (S3-like) **DevOps** Docker, Git (GitHub, GitLab), CI/CD pipelines, AWS, Nginx, monorepo management, Maven, Gradle

**Testing** JUnit, Jest, Vitest, Cypress, Playwright, Scrapy, Selenium

**Frontend** React, Redux, Vue, Next.js, Electron, Reac, CSS3, HTML5, pnpm, vite, webpack

Machine learning NumPy, pandas, scikit-learn, PyTorch, XGBoost

## **EDUCATION**

Master (MSc) AUAS (HvA) Bachelor (BSc) **ITMO University** Amsterdam, the Netherlands Saint-Petersburg, Russia

Major: Software Engineering

- Advanced and computational math

Probability and queueing theory

Web and low-level programming

Algorithms and data structures

Operating systems

Coursework:

**Databases** 

- Microservices

**Patterns** 

Major: Digital Driven Business

Coursework:

- Statistical testing

- Machine learning

Clustering

Deep learning

Scrapy & Selenium

RecSys

MLR models

Research skills

**Ozyegin University** 

**Bachelor** (BSc – Exchange semester)

Istanbul, Turkey

Major: Computer Science (exchange)

Coursework:

- Testing and analyzis

**Parallel Computing** 

Advanced Databases

Computer Networks