Matvei Riabushkin

Software Development Engineer / Moscow, Russia

matveyryabushkin@gmail.com · GitHub · Telegram · keykomi.com · +7 929 665-35-08

PROFILE

Product-minded backend engineer. As a T-Bank intern, helped shape a new service's architecture, contributed to the codebase and worked with product managers, analysts and engineers across teams.

EXPERIENCE

T-Bank Jun 2026 - Sep 2026

Backend Engineering Intern · AI-native Loyalty Platform Moscow

- Built incremental ClickHouse rescoring for audiences of 10-50 million customers. Enabled analysts to test hypotheses more often: rescoring changes took **about an hour instead of over a day**.
- Developed the loyalty platform's MCP server for a financial AI assistant. Replaced mock data with real customers' personalised offers and reduced offers-service load with PostgreSQL cache-aside.
- Optimised context use: cut MCP responses to the agent from **20-30%** to **0.5-0.8%** of the LLM context window, preserving quality and the same result limit.
- Designed a catalogue and SMB offer delivery across backend services, Airflow, ClickHouse and adjacent systems.
- Created AI skills for the bank's internal marketplace; Allure TestOps synchronisation was adopted beyond the team. Set up autonomous E2E checks for two teams; improved a Go LLM gateway (SSE, retries, cancellation, token/cost accounting), MCP metrics and Grafana.

Central University · T-Bank-supported summer practice Jul 2025

Java Backend Developer · Educational team project Moscow

- Built Spring Boot competition and team services; contributed to JWT/BFF integration, API contracts and a Docker Compose deployment on a VPS.

SELECTED PROJECTS

Mnema / *Learning platform for personal study materials*

- Combines Anki's customisation and spaced repetition, Duolingo/Quizlet-style practice and personal learning materials created with LLMs. A dedicated AI harness manages generation, answer checks, usage limits and cost.

AeroChat / *Privacy-focused self-hosted messenger, alpha*

- Chats, calls and files on your own server, prioritising privacy and security. A windowed interface inspired by Frutiger Aero and Windows Vista/7.

BPMN.Space / *AI-first business-process editor*

- An Inter RAO and Yandex hackathon project: AI-first BPMN generation from documents and voice, a polished editor, guided onboarding and sharing for collaboration.

yuzuru-skills / *Tooling across AI harnesses*

- Build skills, plugins, MCP tools, hooks and CLI helpers; update adapters and documentation as AI providers evolve.

Guanxi / *Unified agent harness · in development*

- Designing a plugin-based harness for cloud APIs, subscriptions and local models over SSH: collaborating agents, MCP and mobile control. Focused on long-running sessions with handoff and context management on limited hardware, prioritising quality and safe tool calls; a self-evolving harness concept.

EDUCATION

HSE University, Faculty of Computer Science × Central University 2024 - 2028

Bachelor's in Information Product Design and Development

Third-year student; full-time joint programme.

Moscow School of Programmers 2019 - 2024

Software development programme · Supplementary education

Courses: algorithms and data structures, competitive programming preparation, UI/UX design.

TECHNICAL RADAR

IN-DEPTH KNOWLEDGE / EXPERIENCE WITHOUT AI ASSISTANCE

Programming: Kotlin, Java, Python, C++, SQL

Backend: Spring Boot, WebFlux/MVC, Spring Security, JDBC/JPA, FastAPI, Django, SQLAlchemy, Alembic, Pydantic, gRPC, Protobuf, WebSocket, WebRTC

Data & analytics: PostgreSQL, ClickHouse, Redis, Kafka, NumPy, Pandas, SciPy, Matplotlib

Engineering: Docker/Compose, Linux, GitHub Actions, Nginx, S3/MinIO, OAuth 2.0/OIDC, PKCE, JWT, JUnit/Mockito, JaCoCo, Vitest

AI & agents: MCP, RAG, tools/hooks/skills, evals, Codex, Claude Code, Ollama, llama.cpp, whisper.cpp

APPLIED WITH AI ASSISTANCE

Development: Go, TypeScript/JavaScript, React, Angular, Vue, RxJS/NgRx, Zustand

Infra & QA: Kubernetes/k3s, Airflow, Caddy, Testcontainers, Playwright, Allure TestOps, Grafana, Prometheus, OpenTelemetry

Media & messaging: FFmpeg, OCR/VLM, encrypted messaging

Languages: English C1; Spanish B1; Japanese A2