

# SERGEI GUSEV

## SOFTWARE ENGINEER

gs0xa19f2@tutamail.com | +7 920 120 6928 | [github.com/gs0xa19f2](https://github.com/gs0xa19f2) | @gs0xa19f2 | [leetcode.com/gs0xa19f2](https://leetcode.com/gs0xa19f2)

## EXPERIENCE

---

### Picodata

2025 – Present

#### Rust-Developer

A distributed in-memory NewSQL DBMS with Rust plugin support. Picodata is a fast-growing Russian startup expanding its customer base, including leading national big-tech players

##### **Advanced the tool for Picodata plugin development and management**

Single-handedly implemented key features that formed the foundation for releases **2.9.0** and **3.0.0**, streamlining and accelerating development workflows for all teams.

Key contributions include: an enhanced plugin template, configuration validation, standardized artifact naming, and new options for flexible builds, multi-version testing, dynamic config application, and external plugin support in cluster topologies

##### **Enhanced Cassandra (CQL) protocol compatibility layer**

Resolved critical bugs in the CQL parser, enabling correct processing of requests from native drivers and third-party tools.

Addressed issues such as case-insensitive data types, the use of reserved keywords as identifiers, complex query processing, and support for Cassandra-compliant command combinations

##### **API design for a low-code platform used by a FinTech partner**

Designed and implemented a new RESTful API for table truncation, replacing a legacy mechanism with separate authorization following a migration to Picodata.

Ensured consistent execution of the operation across a distributed cluster by asynchronously dispatching RPC requests to all replicas

## SKILLS

---

**Technologies & Frameworks:** Spring Boot, Microservices, Kafka, Docker, REST, gRPC, JUnit, Mockito, Grafana, Observability, Git, Linux

**Programming Languages:** Rust, Kotlin, Go, C/C++, Java, Python, Bash

**Databases:** Picodata, Cassandra, MongoDB, MySQL, PostgreSQL

**Languages:** Russian (Native), English (C1)

## PROJECTS

---

### Caching and Country Search Plugin for Picodata

Developed an HTTP API with caching (TTL, auto-refresh), error handling, and integration tests

### Command, Audit, and Metrics Library for a Server Application

A Spring Boot starter featuring: a command queue with prioritization and validation, AOP-based auditing, metrics, global error handling, Kafka integration, and comprehensive unit- and integration tests

## EDUCATION

---

### ITMO University

*BS in Computer Science: Programming and Artificial Intelligence*

*All-time ACM ICPC world record holder (multiple championships); one of Russia's leading IT universities. Consistently high positions in QS subject rankings (Computer Science), strong performance in ARWU (Shanghai) and Forbes Russia lists*

## ACHIEVEMENTS

---

Letter of Recommendation from Professors **A. Kulikov** (SPbU, PDMI RAS) and **P. Pevzner** (UCSD).

Ranked in the top 3% of Hyperskill (JetBrains Academy) students worldwide in 2024.

Top-30 in Yandex algorithm training rankings in 2025.