

Fedor Kurmazov

Software Engineer, 4+ years experience, GMT+3

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ABOUT

Software engineer with **4 years** of commercial experience with expertise in **backend development**, working in teams ranging from 2 to 20 members both remotely and on-site. Have modest **team-leading** experience through several contract projects. Able to design a full cycle of development: from product consumer requirements gathering to setting up CI/CD processes.

Interested in **high performance computing**, applications of **algorithms** and **data structures**, and **gamedev**. In my spare time **teaching** discrete mathematics and algorithms at my university.

In addition to programming, had [experience](#) in **computer graphics**, creating 3D models for games, was a regular participant of **math olympiads** and a member of a student scientific society in university.

SKILLS

Programming Languages: Python, C/C++, Rust, Wolfram Language, SQL; **Familiar:** Go, Lua, Haskell.

Technologies: Git, Docker, Linux, Make, CMake, Bash, GitHub Actions, PostgreSQL, YTsaurus, Bevy, Greenplum, ClickHouse, Apache Spark, Gurobi, LaTeX, Blender, GIMP, Inkscape, MS Office.

Abilities: OOP, programming patterns, parallel computing, GPU computing, system design, profiling, debugging, algorithms and data structures, combinatorial optimization, fundamental mathematics.

Languages: Russian (native), English (fluent).

RELEVANT EXPERIENCE¹

Yandex Go (St. Petersburg):

2021-08 – 2025-04

Software Engineer, Data Management Platform (DMP)

- Developed infrastructure for Data Warehouse with **several PiB of data**: integrated DWH with other services, extended data-entity **Python DSL**, designed an **ergonomic API** for Data Engineers.
- Developed a **plugin framework** and integrated it into the ETL processes, providing a common interface to **decouple** minor capabilities (logging, events, metrics collection, metadata updates, etc.).
- Implemented a **notification system** that reports ETL task execution status to improve observability.
- Integrated DMP and reactive execution system, **enabling** data consumers to subscribe to the platform's ETL pipelines.
- Reduced the total execution time of integration tests by **2 times**.

Technologies: Python, PostgreSQL, YTsaurus, Greenplum, ClickHouse, Spark, Ubuntu, TeamCity.

(Contract) Huawei, PDMI RAS (Steklov Institute, St. Petersburg)

2024-06 – 2024-09

Technical Lead / Software Engineer — [Cirbo](#) (Boolean Circuit Analysis & Synthesis Lib)

- Led a **6-engineer team**: architecture, tech-stack selection, code reviews, regular 1:1s.
- Delivered the library in time for the paper-submission deadline (it was **accepted to [AAAI-2025](#)**).
- Set up library structure: dependencies, packages hierarchy, readme's, documentation (Sphinx).
- Integrated ABC and mockturtle C++ libraries as **CPython extensions** (pybind11).

Technologies: Python (poetry, mypy, flake8, black), C++17, Github Actions (unit tests, cibuildwheel).

EDUCATION

COMPUTER SCIENCE CENTER, 2019–2022

Full-time **3 year** courses on «Computer Science» and «Software Engineering».

SAINT PETERSBURG STATE UNIVERSITY OF ECONOMICS – MASTER, 2020–2022

«Applied Mathematics in Economics (Operations Research)».

SAINT PETERSBURG STATE UNIVERSITY OF ECONOMICS – BACHELOR, 2016–2020

«Applied Economics (Mathematical and Statistical Methods In Economics)».

¹ Full experience is listed in the [CV](#).