

Daniil Gagarinov

SENIOR C++ ENGINEER

Moscow, Russia

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Summary

Senior C++ Engineer with 7+ years in C++, now specializing in high-load distributed systems and performance-critical backend infrastructure. Currently designs scheduling algorithms for large GPU/CPU clusters at YTsaurus, operating at the scale of millions of CPUs and tens of thousands of operations per second.

Skills

Languages	C++ (23/26), C, Python, SQL
High-Load & Distributed Systems	Distributed scheduling, high-RPS pipelines, low-latency, gRPC, multithreading, profiling
Storage & Data	YTsaurus (YT), MongoDB, distributed storage, relational databases
Platforms & Tooling	Linux, OpenTelemetry, CMake, Bazel, Docker, gtest

Experience

Yandex YT (YTsaurus), Scheduling team

Moscow, Russia

SENIOR SOFTWARE ENGINEER

October 2025 - current

- YTsaurus — open-source distributed storage and processing platform for Big Data
- Designed and rolled out a new GPU-specific scheduling algorithm for clusters with several thousand GPUs, serving thousands of operations per second
- Extended the core CPU scheduler that serves millions of CPUs and tens of thousands of operations per second
- Technologies: C++, high-load distributed systems, perf, gdb, YT

Yandex Maps, B2B Infrastructure team

Moscow, Russia

SENIOR SOFTWARE ENGINEER

December 2024 - October 2025

- Built a B2B platform of C++/gRPC services (hundreds of RPS) for managing Yandex Maps API keys: added request signing for security and internal processes for key lifecycle and API billing
- Designed the statistics pipeline that computes per-key API RPS, powering rate limiting and billing
- Delivered a limiter capping the number of unique key users (DAU); migrated API key storage to a new format
- Technologies: C++, Python, gRPC, YT, MongoDB

Vk tech, Federation team

Moscow, Russia

SENIOR BACKEND DEVELOPER

July 2024 - December 2024

- Designed and built the federated protocol enabling communication between independent SaaS installations of a corporate messenger (VK Teams)
- Built cross-federation message and notification delivery and contact search across federations
- Implemented OpenTelemetry distributed tracing over the proprietary binary inter-service protocol, adding cross-service observability where none existed
- Technologies: C++, Go, OpenTelemetry, perf, gdb

Yandex SDG, team of performance and reliability

Moscow, Russia

SOFTWARE DEVELOPER

July 2021 - January 2024

- Built load-testing and release-acceptance pipelines (dashboards, load-testing metrics) for self-driving cars and delivery robots
- Rewrote the metrics-processing pipeline from Python to C++, cutting one batch from 40 minutes to 5 minutes (8x); migrated it from bash scripts to full DAGs in Nirvana (Yandex's Airflow analog)
- Redesigned the log playback system and enabled the cpuset feature for CPU isolation
- Technologies: C++, Python, Bazel, Nirvana, perf, gdb, ROS

Sky-Drones Technologies Ltd

Moscow, Russia

SOFTWARE DEVELOPER

May 2018 - July 2021

- Developed SmartAP-GCS (drone operations management software) and Airlink (AI and remote link)
- Technologies: C++, Qt, qml, python, gstreamer, mavlink

Teaching

MIPT

Moscow, Russia

C++ TEACHER

September 2021 - current

- Deliver C++ lectures and seminars to an audience of 100 students at the Phystech School of Applied Mathematics and Informatics (PSAMI) and the Higher School of Software Engineering (HSSE)

Education

Moscow Institute Of Physics and Technology (SAMCS)

Moscow, Russia

B.S. IN COMPUTER SCIENCE

2022