Svyatoslav Feldsherov

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KEY SKILLS

SWE · User space Networking
Distributed systems · Concurency
Performance · Algorithms
Backend · DevOps

LANGUAGES

C++ · Python · Go

TECHNOLOGIES

Linux · TCP IP · HTTP · HTTP2 grpc · protobuf · Docker git

EDUCATION

MOCSOW STATE UNIVERSITY 2013-2019 | MS in Math

GPA: 5.0/5.0

YANDEX SCHOOL OF DATA ANALYSIS

2016-2018 | CS Track

Yandex School of Data Analysis is a Machine Learning and Computer Science school in Moscow.

TECHSPHERE

2016-2017 | Data analysis and ML

Techsphere is an educational project hosted by Mail.ru Group and Computer Science faculty at Moscow State University.

COURSEWORK

Algorithms and Data structures Advanced Machine Learning Bayesian Methods for Machine Learning Computational complexity Information theory

Large-scale machine learning
Natural language processing
Numerical methods
Operating systems

EXPERIENCE

Google Cloud, Virtual Network Dataplane Telemetry

08.2022-present | Software Engineer

Working about packet sampling in virtual network data plane. Main part is instrumentation of virtual networking components with packet sampling. Main technologies are internal DPDK-like framework, C++ in network data plane plus grpc and C++ for packet samples processing.

Main achievements are instrumnetaion of a new virtual networking data plane component, 2-10% fast path packet processing speedup by moving expencive syscalls from fast path, introduce framework for simplification of packet drops debugging.

Yandex Search

06.2020-06.2022 | Teamlead

My team was working on a company-wide microservices framework, which serves 1000 microservices, 10 millions requests per second.

We used C++ for data plane, Python for control plane, and tests/infrastructure. Main achievements are 99.999% availability, HTTP transport replacement with faster implementation, speedup of distributed tracing over our framework from minute to 1-3sec per request.

Yandex Search

11.2018-06.2020 | Software Engineer

Worked on Search Infrastructure team. C++, Python, grpc, networking. Designed and implemented SDCH support for Search Engine Result Page. Main part was C++ backend with custom SDCH implementation.

Improved search query preprocessing pipeline. Reimplemented part of business logic with C++, fixed some architectural problems, got speedup.

Google

07.2018-10.2018 | Software Engineering Intern

Worked on Shopping Data Quality team. Primary C++, MapReduce, Stubby. Designed and implemented an infrastructure for intellectual scheduling of merchants review. This infrastructure helped to improve existing scheduling logic and allowed the team to migrate from several legacy services.

Yandex Ads

03.2017-06.2018 | Junior Backend Developer

Designed and implemented distributed log collection and event plotting system using internal technologies, including YT — Bigtable-like storage with MapReduce framework on top of it.

Used coroutine-based web server and batch requests in order to handle required RPS on a small number of servers and not to overload other services.

This feature enabled the frontend team to log any client-side event (usually JS code in a browser) and plot number of any events on clients in real time.

Mail.ru Group, Tarantool

02.2016-12.2016 | Software Engineering Intern

Tarantool is an in-memory NoSQL database implemented in C with some C++. Implemented a proof of concept version of SQL in Tarantool. We combined SQLite parser and execution engine with Tarantool internal structures (B+*-tree). Fixed some bugs in Tarantool test engine.

Added intrusive heap to Tarantool data structures library.

COMPETITIVE PROGRAMMING

Russian National Olympiad in Informatics 2012 | prizewinner

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