# Svyatoslav Feldsherov

svyat@feldsherov.name | +972-53-451-4602 | linkedin.com/in/svyat | github.com/feldsherov

## KEY SKILLS

SWE · User-space networking Distributed systems · Concurrency Performance · Algorithms Backend · DevOps

## LANGUAGES

C++ · Python · Go

## **TECHNOLOGIES**

Linux · Networking gRPC · Protobuf · Docker Git

## FUN FACTS

- · Speaker at C++ On Sea 2024
- · Speaker at C++ Russia 2024
- · Fixed (tiny) crash in Linux kernel
- · Speaker at YaTalks 2023

### **EDUCATION**

MOSCOW STATE UNIVERSITY 2013-2019 | MS in Math GPA: 5.0/5.0

## YANDEX SCHOOL OF DATA ANALYSIS

2016-2018 | CS Track

Machine Learning and Computer Science school in Moscow.

#### **TECHSPHERE**

2016-2017 | Data analysis and ML

Educational project hosted by Mail.ru Group and Computer Science faculty at Moscow State University.

## COMPETITIONS

## Russian National Olympiad in Informatics

2011, 2012 | Prizewinner

## **EXPERIENCE**

## Google Cloud, Virtual Network Dataplane Telemetry

08.2022-present | Senior Software Engineer / Tech Lead

Working on Google Cloud virtual network telemetry.

Main achievements: provided telemetry features for C3 family of VMs, supported Inter-VPC NAT telemetry, 2-10% fast path packet processing speedup. Technologies: internal DPDK-like framework, C++ in network data plane plus

gRPC and C++ for packet samples processing.

#### Yandex Search

### 10.2019-08.2022 | Principal Software Engineer / Tech Lead Manager

I was working on a company-wide microservices framework, which serves 1000+ microservices, 10+ million requests per second.

Main achievements company wide adoption of framework, numerious product launches unblocked by framework features.

Technical achievements: 99.999% availability, HTTP transport replacement with faster implementation, speedup of distributed tracing over our framework from minute to 1-3sec per request.

Team was using C++ for data plane, Python for control plane, and tests/infrastructure.

#### Yandex Search

#### 09.2018-10.2019 | 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, speedup of 5-10ms on the affected slice of traffic.

#### Google

#### 07.2018-09.2018 | 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

#### 03.2017-07.2018 | Junior Backend Developer

Designed and implemented distributed log collection and event plotting system using internal technologies, including YTsaurus — 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.