

Oleg Fafurin

Expert in **Algorithms and Data structures**
with **SWE** and quantitative research experience
and **EPFL Master in Computer Science**

Email: olegfafurin1@gmail.com

Mobile: +41 76 265 32 41

Github: github.com/olegfafurin

LinkedIn: [olegfafurin](#)

Experience

- **Alpian** Geneva
SWE intern — **Java** Spring + React & **TypeScript** Mar 2024 - Sept 2024
 - Developed an **Gemini**-powered text-to-SQL translation for an innovative banking service
- **EPFL, Theory of Computation Laboratory** Lausanne
Research Assistant (part-time) Sept 2022 - Aug 2023
 - Conducted research in Linear optimization theory
- **WorldQuant** St. Petersburg
Quantitative Researcher (Full-time) — **C++** Nov 2021 - Jun 2022
 - Developed systematic trading **algorithms** to infer valuable market statistics and signals
- **JetBrains** St. Petersburg
SWE Intern, [Index Viewer project](#) — **Kotlin** + **Java**, backend July 2021 - Aug 2021
 - Implemented 3 new features for Index Viewer in 2 months, e.g. remote IDE **search index** viewing (**gRPC**)
- **Yandex** St. Petersburg
SWE Intern, Content Recommendations team — **Python** Jan 2020 - June 2020
 - Evaluated and analyzed a calibrated ranking approach to increase recommendations diversity
 - Used in-house **SQL** dialect to retrieve statistics for better **ML** models design decisions

Skills

- Frameworks & Tools: **gRPC**, Spring Boot, React, Git, Docker, Kubernetes, SQL, Github Actions, ArgoCD, CLI
- Programming languages: **Java**, **Kotlin**, **C++**, **Python**, familiar with Julia, Haskell

Education

- **EPFL, IC** Lausanne, Switzerland
Master in Computer Science Sept 2022 - Feb 2025
Thesis: Graph sparsification and metric backbone
- ITMO University, Computer Technologies dept. St. Petersburg, Russia
Bachelor of Computer Science, Sept 2017 - June 2021
Thesis: Streaming algorithm for a probabilistical decomposition of finite metrics into tree metrics
Got my *A* for **Algorithms and Data Structures** from **ICPC** world champion [Gennady Korotkevich](#)

Projects

- Community detection (**Julia**)
Analyzed, implemented and evaluated modularity-based community detection algorithms
- **Tic-Tac-Toe** (**Haskell**)
A console PVC Tic-Tac-Toe game in Haskell as part of the Functional Programming course
- Aztec Diamond (**C++**)
Research project in probabilistic combinatorics exploring the features of randomly distributed structured object

Prizes, Awards, Scholarships

- [Huawei](#), [Wartsila](#) student research scholarships (top-5%) — 2020-2021
- International Experimental Physics Olympiad — Bronze Medal in 2015
- Russian Mathematical Olympiad — *Final stage* — Prize in 2015, 2016 (top-0.1% on a national level)
- Russian Physics Olympiad — *Final stage* — Prize in 2015

Extracurricular Activities

- [LauzHack](#), [Wartsila](#), [BSA Sui](#) student hackathons at EPFL and ITMO 2020-2024
- Sports: Mountain and road cycling, hiking, entry-level volleyball and bouldering