FEDOR KUYANOV

Education

Higher School of Economics

September 2020 – July 2024

Bachelor in Computer Science, GPA 9.72/10

Moscow, Russia

Work experience

Huawei June 2022 – December 2022

Software Engineer

Moscow, Russia

- Member of the graph computing team focused on fluid and gas processes simulation using discrete lattices.
- Implemented distributed versions of algorithms in Linear Algebra, such as the Conjugate gradient method and Lanczos algorithm.

Yandex May 2021 – August 2021

Software Engineer Intern

Moscow, Russia

- Worked in the team responsible for the quality of Yandex voice assistant Alice.
- Enhanced scenario classification by adding new factors and adapting the learning process for different devices.
- Ran an experiment on real users to measure its quality.

Summer informatics workshop

June 2020

Moscow, Russia

• Prepared practice contests and tutorials for Russian national team candidates.

Projects

Coach

 $\underline{\mathbf{Wordle}} \mid C++, JavaScript$

August 2022

- The goal of this game is to guess a 5-letter word in 6 tries based on the information about each letter.
- Two modes: "random" and "hater", meaning that the answer is selected randomly or adaptively.
- Also implemented a heuristic strategy that uses 3.52 tries on average, which is close to the record 3.42.

Fejudge | Python, Linux kernel

September 2021

- This is a management system for programming contests with a web interface.
- It uses several Linux kernel features (such as cgroups) and supports simultaneous evaluation on different machines.

TheTrueHat | JavaScript, Vue

August 2021

• This project allows playing the Hat (Alias) game from the browser.

Kotline | Kotlin, React

January 2021

- This is a geometric puzzle where one must build the longest non-self-intersecting polygonal chain from start to end.
- Also contains a mode where one can find the best solution automatically.

$\underline{\mathbf{Examiner}} \mid Python, \ QT$

September 2019

• A platform to automate school exams, with UIs for students and teachers.

Skills & interests

- Programming languages: C/C++, Python, Kotlin, HTML/CSS, JavaScript, Bash, SQL
- Libraries & frameworks: QT, NumPy, matplotlib, pandas, PyTorch, Flask, React, Vue
- Tools: CI/CD, git, docker, gdb, cmake
- Computer Science skills: advanced algorithms and data structures, including distributed and streaming algorithms
- Mathematical skills: Linear Algebra and Geometry, Discrete Math, Probability Theory, Math Analysis, etc.
- Interested in: Theoretical Computer Science, high-load systems, web-servers, front-end

Awards

- Ilya Segalovich Scholarship, the top award of Computer Science Faculty, HSE (2022)
- Tinkoff Scholarship (2022)

Olympiad achievements

- Gold medal at $\underline{\mathrm{IMC}\ 2021}$ and $\underline{\mathrm{IMC}\ 2022}$
- Silver medal at Semifinal ICPC 2020, NERC
- 1st place at the All-Russian Team Olympiad in Informatics (2018-2019)
- Winner of the All-Russian Olympiad in Informatics (2018), prize-winner in 2017, 2019, 2020
- Prize-winner of the All-Russian Olympiad in Mathematics (2018, 2019, 2020)
- Codeforces

Languages

English: C1 (IELTS 7.0)Russian: Native speaker

Hobbies

- Railway modeling, Lego
- Chess, speed-cubing (3x3, 36 secs), ping-pong
- Classical piano finished 8-year Gnesin music school and performed with the orchestra, <u>YouTube</u>, winner of Moscow and international piano competitions