

IVAN ZHUKAU

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ABOUT

- C++ / Python Developer • Competitive Programmer
- Strong background in algorithms, data structures and optimization.
- Interests: Software Engineer, research, quant finance, algorithmic trading, HFT, financial markets

TECHNOLOGIES

- Languages: C++17/20, Python, Go
- Tools & OS: Linux, Bash, Git, Docker, CMake
- CS Fundamentals: algorithms & data structures, competitive programming, networking (TCP/IP, sockets), multithreading, memory management
- Machine Learning / Data: NumPy, pandas, scikit-learn, matplotlib

WORK EXPERIENCE & CHALLENGES

Huawei iRunner Challenges

Dec 2022 - Nov 2025

- Winner of Huawei iRunner Challenges (Oct 2022, Dec 2023, Nov 2025).
- Solved optimization problems where ranking depended on solution quality rather than just correctness (4th, 5th and 6th places).
- Stack: C++, algorithms and data structures, linear algebra, performance optimization.

NearCrowd | AI Model Trainer

Dec 2022 - May 2025

- Analyzed and annotated large data sets used to train AI models, ensuring a high standard of accuracy and consistency in solving competitive programming problems.
- Stack: C++, Algorithms and Data structures.

Harbour.Space | Python developer

Aug 2025 - Nov 2025

- Built a tool to search for talented students from programming olympiads and competitions and store them in a database.
- Implemented web scraping with Scrapy, parsed public rankings and profiles, and stored structured data in MySQL.
- Designed database schema and queries to search candidates efficiently.
- Stack: Python (Scrapy), SQL (MySQL), Linux.

Algorithms and data structures Instructor

Sep 2023 - Feb 2025

- Taught algorithms in camps and schools.
- Places: Leagues of Code, NlogN summer camp 2025, singularity.academy

EDUCATION

Higher School of Economics (Moscow)

Sep 2024 - May 2025

- Degree: Bachelor of the Higher School of Economics. Faculty of Computer Science. Applied mathematics and computer science. Advanced course in mathematics and programming
- Coursework: Calculus, Number Theory, Discrete Math, Linear algebra and geometry, Advanced C++ (OOP, threads, memory and etc), Python(in math Labs. Using NumPy, Pyplot, scipy), algorithms and data structures.

Harbour.Space (Spain)

May 2025 - May 2027

- Degree: Bachelor of the Harbour.Space University. Faculty of Computer Science.
- Coursework: Mobile dev(Kotlin), Unity Game Dev(C#), COAS (C + Architecture + bash + NASM), Databases(SQL, MySQL), Linear Algebra 2, Machine learning for masters
- Current GPA: 3.54

Projects

- C backend api (A tiny HTTP JSON service to store and retrieve (with Docker support)) | [link](#)
- An archiver using the Huffman code (C++) | [link](#)
- Contributer of project for stress testing of solutions to sport programming problems (C++) | [link](#)

OLYMPIAD ACTIVITIES

- Codeforces rating: 2202
- Silver medalist of the 20TH INTERNATIONAL ZHAUTYKOV OLYMPIAD
- Prize-winner of the XVII Open Olympiad of Schoolchildren on Programming, 2023/24
- Gold medalist of the EUROPEAN JUNIOR OLYMPIAD IN INFORMATICS, 19-25 SEPTEMBER 2022
- Second degree diploma of the XXIII All-Russian Open Team Programming Olympiad 2022
- The equivalents of a silver medal IATI Junior 2023 and a bronze medal IATI Senior 2024.
- Third degree diploma of the Belarusian Republican Olympiad in Informatics 2023
- and others