Timur Kharisov

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Website: kharisov.me LinkedIn: @tkharisov7 Residence: Paris, France Date of birth: March 26, 2002 Citizenship: Russian Federation

EDUCATION

Paris-Saclay University - Graduate School of Mathematics §

Orsay, France

M2 (M.Sc.) in Optimisation at the Mathematics and Applications program, GPA: exp. 16-17/20

Sep 2024–Sep 2025

Yandex School of Data Analysis 😵

Remote

AI online program (non-degree) comprising Master's in Data Science courses.

Sep 2022–May 2026

Moscow Institute of Physics and Technology & #1 technical school in Russia B.S. in Computer Science and Applied Mathematics, GPA: 9.11/10 (4.91/5.0), transcript

Moscow, Russia Sep 2020-Jun 2024

Thesis: "Optimization of Communication Overhead in Federated Learning for Machine Learning Models" supervised by Prof. Peter Richtárik (final score by the committee: 10/10).

EXPERIENCE

Visiting Student Researcher

Thuwal, Saudi Arabia

Oct 2023-Mar 2024

King Abdullah University of Science and Technology

- Working in the Optimisation and Machine Learning Research Group supervised by <u>Peter Richtarik</u>. - Projects on Federated Learning Optimisation resulted in an oral presentation at FL@FM NeurIPS 2024 and pending conference submission.
- Skills acquired: Theoretical and Experimental research in Federated Learning, Optimisation, and Machine Learning.

Quantitative Research Intern

Yerevan, Armenia

WorldQuant LLC

Jul 2023-Sep 2023

- Spearheaded a project focused on enhancing the speed and performance of a trading algorithm.
- Successfully boosted the portfolio optimization operation execution speed by up to 20 times, while concurrently integrating highly customizable features.
- Skills acquired: Applications of Optimisation and Linear Algebra, C++ Development, Quantitative Finance.

Machine Learning Engineering Intern

Moscow, Russia

Yandex LLC

Jul 2022-Oct 2022

- Worked in the Quality and Scenarios team at Alice virtual assistant (50+ million monthly users).
- Improved the End-to-end Alice search app quality by 0.4% through optimizations in the ML models training pipeline. Contributed to the development of Alice for the new Yandex Station Duo Max device.
- Skills acquired: Applications of NLP and Machine Learning, Experimental Research, Python and C++ Development.

Achievements and Scholarships

Excellence Undergraduate and Graduate Scholarships

 $Jan\ 2021-Jun\ 2025$

Sophie Germain Master Scholarship (2024-2025) - Highly competitive scholarship for top students in Mathematics. Academic Track of Tinkoff Scholarship (2023-2024) -

Scholarship awarded for students demonstrating outstanding academic performance. (top 200 of 13000 applicants) Government Academic Excellence Scholarship (2023-2024) - "Exceptional achievements in research work". Abramov Scholarship for Academic Excellence (2021-2023) - Top 5% students of MIPT university.

Data Engineering "Hack & Change" Hackathon - Absolute Winner (top 1 of 60 teams) Led team of 5 people for implementing efficient Mobile Services users data aggregation application. Nov 2021

• Final of All-Russian National Olympiad in Mathematics

Apr 2020

Most prestigious national competition in Mathematics. - Prize Winner (top 100 of 40000 participants)

SKILLS

- Problem Solving: Competitive (Olympiad) Mathematics, Competitive Programming.
- Mathematics: Advanced Linear Algebra, Advanced Calculus, Probability Theory, Differential Equations, Stochastic Analysis, Statistics, Optimization, Game Theory, Discrete Mathematics, Learning Theory (ML), Complexity Theory.
- Software Engineering: C++, Python, C, ASM, MapReduce, Databases (SQL, Apache Spark/Hive, Redis), PyTorch/JAX/HuggingFace, Docker, Linux, Git, CI&CD, Software Design Patterns, Algorithms and Data Structures.
- Research Skills: IATEX, Experiment Setup, Research Paper Writing, Literature Review, Conference Submission.
- Languages: English (C1, IELTS Academic Band 8, Public Speaking), Russian (Native), French (A1)