

Kuruzov Ilya

 Moscow, Russia
 +7 (926) 452 63 77
 kuruzov.ia@phystech.edu
 Telegram: @EliasKur

CURRENT RESEARCH INTERESTS

1. Decentralized Optimization
2. Optimization with Inexact Gradient
3. Optimization in Machine Learning

WORK EXPERIENCE

MARCH 2020 – PRESENT

Russia, MIPT, Laboratory of Numerical Methods for Applied Structural Optimization
Research Assistant (March 2020 – March 2022), Junior Researcher (March 2022-Januray 2025), Researcher (Januray 2025-Present)

Researched and developed algorithms for convex, non-convex, and mixed-integer optimization, delivering solutions for commercial projects in active noise control, time series analysis, and neural network optimization and compression, developing a mixed-integer solver in C++.

JUNE 2020 – MAY 2024

Russia, IITP, Sector 7
Trainee Researcher (June 2020 – May 2023), Junior Researcher (May 2023-Present)

Researched and engineered a new algorithm for Integer Least Squares problems, enhancing signal recovery quality by 20-40% for a collaborative project with Huawei.

SEPTEMBER 2022 – DECEMBER 2022

Russia, HSE University, International Laboratory of Stochastic Algorithms and High-Dimensional Inference
Research Assistant

Research of algorithms for neural network quantization in cooperation with Huawei.

TEACHING

SEPTEMBER 2020 – PRESENT

Russia, MIPT, Department of Discrete Mathematics

Assistant

Teach the subject "Methods of Convex Optimization"

SEPTEMBER 2022 – DECEMBER 2023

Russia, MIPT, Department of Computational Physics

Assistant

Lector of the subject "Optimization Methods for Machine Learning"

SEPTEMBER 2023 – PRESENT

Russia, AI Masters

Research Assistant

Teach the subject "Methods of Convex Optimization"

EDUCATION

2016 – 2020 **Applied Math and Computer Science**

BACHELOR OF SCIENCE
MIPT, Russia, Moscow

2020 – 2022 **Applied Math and Computer Science**

MASTER OF SCIENCE
MIPT, Russia, Moscow

2022 – PRESENT **Applied Math and Computer Science**

PHD
MIPT, Russia, Moscow

COMMUNICATION SKILLS

RUSSIAN Native speaker

ENGLISH Intermediate

PROGRAMMING SKILLS

GOOD LEVEL Python3, C++

BASIC LEVEL C, Bash

SELECTED RESEARCH PUBLICATIONS

MAY 2025

I. Kuruzov, A. Rogozin, D. Yarmoshik, A. Gasnikov

The mirror-prox sliding method for non-smooth decentralized saddle-point problems Optimization Methods and Software

MAY 2025

I. Kuruzov, M. Alkousa, F. Stonyakin, A. Gasnikov

Gradient-Type Methods For Decentralized Optimization Problems With Polyak-Łojasiewicz Condition Over Time-Varying Networks Optimization Methods and Software

DECEMBER 2024

I. Kuruzov, G. Scutari, A. Gasnikov

Achieving linear convergence with parameter-free algorithms in decentralized optimization Advances in Neural Information Processing Systems

JUNE 2023

F. Stonyakin, I. Kuruzov, B. Polyak

Stopping Rules for Gradient Methods for Non-Convex Problems with Additive Noise in Gradient J Optim Theory Appl 198, 531–551 (2023).

AUGUST 2023

E. Gladin, I. Kuruzov, F. Stonyakin, D. Pasechnyuk, M. Alkousa, A. Gasnikov

Solving strongly convex-concave composite saddle point problems with a small dimension of one of the variables Sbornik: Mathematics, Volume 214, Issue 3, Pages 285–333