

Rustem Islamov

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EDUCATION

Master of Science in Applied Mathematics and Physics

[Moscow Institute of Physics and Technology](#)

Sept. 2021 – Pres.

Dolgoprudny, Russia

Master of Science in Applied Mathematics

[Institut Polytechnique de Paris](#)

Sept. 2021 – Pres.

Palaiseau, France

Bachelor of Science in Applied Mathematics and Physics

[Moscow Institute of Physics and Technology](#)

GPA: 4.96/5 (9.27/10), Top 3 at the department

Sept. 2017 – July 2021

Dolgoprudny, Russia

RESEARCH INTERESTS

Machine Learning, Optimization, Distributed Optimization

PROJECTS AND EXTRA ACTIVITIES

Introduction to Scientific work

Feb. 2020 - May 2020

- Course name: My First Scientific Paper
- Supervisor: [Vadim Strijov](#)
- Brief Description: Learned how to write scientific papers, organize work within a group
- Analysis of the ensemble of local models, [paper on Github](#) (in Russian)

Project on Optimization Methods

Apr. 2020

- Brief Description: Implemented different Optimization methods for improving the quality of classification models (Logistic Regression, SVM), methods for Trend Filtering
- [Project on Github](#)

Mathematics and Python for Data Analysis in Coursera

Feb. 2020

- Brief Description: Learned Mathematics for Data Analysis and how to use it in Python
- [Certificate](#)

Introduction to Programming (C++)

Jul. 2016

- Brief Description: Learned C++ for solving different mathematical and programming problems
- [Certificate](#)

LANGUAGES

Russian: Native

English: Advanced (C1)

French: Elementary (A1)

TECHNICAL SKILLS

Operating Systems: Microsoft Windows, Linux

Programming Languages: Python, C/C++

Professional Software: Git, LaTeX, SQL

HOBBIES AND INTERESTS

Football, member of student football team

Basketball

Travelling, hiking, photo shooting

PUBLICATIONS

3. [X. Qian, R. Islamov, M. Safaryan, P. Richtárik](#). **Basis Matters: Better Communication-Efficient Second Order Methods for Federated Learning**, in [Proc. of the 25th International Conference on Artificial Intelligence and Statistics](#), 2022.
2. [M. Safaryan, R. Islamov, X. Qian, P. Richtárik](#). **FedNL: Making Newton-Type Methods Applicable to Federated Learning**, accepted to [FL-ICML 2021](#) and [BFOM-ICML 2021](#) workshops, arXiv preprint: [arXiv:2106.02969](#), 2021.
1. [R. Islamov, X. Qian, P. Richtárik](#). **Distributed Second Order Methods with Fast Rates and Compressed Communication**, In [Proc. of 38th International Conference on Machine Learning](#), 2021.

SCHOLARSHIPS, HONORS AND AWARDS

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| Scholarship in Belotserkovsky O. M. name Given to support students who are actively engaged in research and Olympiad activities in the field of Computer Science; 15 000 Russian roubles per month | Feb. 2022 – June. 2022 |
| Increased State Academic Scholarship Given for 4 year Bachelor and Master students at MIPT with scientific achievements; 16 000 Russian roubles per month | Feb. 2022 – June. 2022 Sept. 2021 – Jan. 2022 Feb. 2021 – June 2021 Sept. 2020 – Jan. 2021 |
| Scholarship for Contribution to the Development of Numerical Optimization Methods 8 000 Russian roubles per month | Feb. 2022 – June. 2022 Sept. 2021 – Jan. 2022 |
| Forecsys Research Scholarship 20 000 Russian roubles per month | Sept. 2021 – Jan 2022 |
| PhD Track Excellence Scholarship The Institut Polytechnique de Paris awards merit-based excellence scholarships for students enrolled in PhD tracks; 1000 Euro per month | Sept. 2021 – Mar. 2022 |
| Prizewinner of Student Olympiad in Maths “I am professional” Student Olympiad organized by Yandex and MIPT | Apr. 2020 |
| Abramov scholarship Given for 1-3 year Bachelor students with the best grades at MIPT; 12 000 Russian rubles per month | Sept. 2017 – June 2020 |
| Prizewinner of Final Round of All-Russian Physics Olympiad | Apr. 2016 |
| Participant of Final Round of All-Russian Physics Olympiad | 2015, 2017 |

TALKS AND POSTERS

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| Poster at International Conference on Artificial Intelligence and Statistics , Links: poster | 29 March, 2022 |
| Prerecorded talk at Beyond first-order methods in ML systems workshop , Links: video | 24 July, 2021 |
| Poster at International Workshop on Federated Learning for User Privacy and Data Confidentiality , Links: poster | 24 July, 2021 |
| Poster and Prerecorded Talk at International Conference on Machine Learning , Links: video , poster | 22 July, 2021 |
| Poster at PRAIRIE/MIAI AI Summer School , Links: poster | 6 July, 2021 |
| Talk at Maths & AI: MIPT-UGA young researchers workshop , Links: video , slides | 1 July, 2021 |
| Prerecorded talk at KAUST Conference on Artificial Intelligence , Links: video | 28 April, 2021 |
| Poster at NSF-TRIPODS Workshop on Communication Efficient Distributed Optimization , Links: poster | 9 April, 2021 |

RESEARCH VISITS AND INTERNSHIPS

Internship at Machine Learning and Optimization Lab

[EPFL](#), Supervisors: [Hadrien Hendrikx](#), [Martin Jaggi](#)

Apr. 2022 – Pres.
Lausanne, Switzerland

Internship at Machine Learning and Optimization Lab

[KAUST](#), Supervisor: [Peter Richtárik](#)

Jul. 2020 – Dec. 2020

Thuwal, Saudi Arabia

Internship at Machine Learning and Optimization Lab

[KAUST](#) , Supervisor: [Peter Richtárik](#)

Mar. 2020 – Aug. 2020

Thuwal, Saudi Arabia

SUMMER SCHOOLS

[PRAIRIE/MIAI AI Summer School](#), Links: [certificate](#)

5-9 July, 2021

Last updated on April 29th 2021