Rustem Islamov

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EDUCATION

Master of Science in Applied Mathematics and Physics

Moscow Institute of Physics and Technology

Dolgoprudny, Russia

Sept. 2021 – Pres.

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

- 4. R. Islamov, X. Qian, S. Hanzely, M. Safaryan, P. Richtárik. Distributed Newton-Type Methods with Communication Compression and Bernoulli Aggregation, arXiv:2206.03588, 2022.
- 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, 2021.
- 2. M. Safaryan, R. Islamov, X. Qian, P. Richtárik. FedNL: Making Newton-Type Methods Applicable to Federated Learning, In Proc. of 39th International Conference on Machine Learning, 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

Optimization, Links: poster

Scholarishin S, Honords and Twards	
Scholarship in Belotserkovsky O. M. name	Feb. 2022 – June 2022
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	
Increased State Academic Scholarship	Feb. 2022 – June 2022
Given for 4 year Bachelor and Master students at MIPT with scientific achievements;	Sept. 2021 – Jan. 2022
16 000 Russian roubles per month	Feb. 2021 – June 2021
	Sept. $2021 - Jan. 2022$
	Feb. 2022 – Jan. 2023
Scholarship for Contribution to the Development of Numerical	Feb. 2022 – June 2022
Optimization Methods	Sept. 2021 – Jan. 2022
8 000 Russian roubles per month	Feb. 2021 – June 2022
Forecsys Research Scholarship	Sept. 2021 – Jan 2022
20 000 Russian roubles per month	1
PhD Track Excellence Scholarship	Sept. 2021 – Mar. 2022
The Institut Polytechnique de Paris awards merit-based excellence scholarships for	Sept. 2022 – Mar. 2023
students enrolled in PhD tracks; 1000 Euro per month	
Prizewinner of Student Olympiad in Maths	Apr. 2020
"I am professional" Student Olympiad organized by Yandex and MIPT	ı
Abramov scholarship	Sept. 2017 – June 2020
Given for 1-3 year Bachelor students with the best grades at MIPT;	5 P 1 2 2 2 3 3 3 3 2 3 2 3 2 3
12 000 Russian rubles per month	
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	
Poster at International Conference on Artificial Intelligence and Statistics,	29 March, 2022
Links: poster	
Prerecorded Talk at Beyond first-order methods in ML systems workshop,	24 July, 2021
Links: video	
Poster at International Workshop on Federated Learning for User Privacy and Data	24 July, 2021
Confidentiality, Links: poster	
Poster and Prerecorded Talk at International Conference on Machine Learning,	22 July, 2021
Links: video, poster Poster at DRAIDIE/MIALALSummer School Links: poster	e I1 0001
Poster at PRAIRIE/MIAI AI Summer School, Links: poster Talk at Maths & AI: MIPT-UGA young researchers workshop, Links: video, slides	6 July, 2021
Prerecorded Talk at KAUST Conference on Artificial Intelligence, Links: video	1 July, 2021 28 April, 2021
Poster at NSF-TRIPODS Workshop on Communication Efficient Distributed	9 April, 2021
Ontimization Links poster	5 11p1111, 2021

RESEARCH VISITS AND INTERNSHIPS

Internship at Machine Learning and Optimization Lab	Apr. 2022 – Aug. 2022
EPFL, Supervisors: Hadrien Hendrikx, Martin Jaggi	Lausanne, Switzerland
Internship at Optimization and Machine Learning Lab	Mar. $2021 - Aug. 2021$
KAUST, Supervisor: Peter Richtárik	Thuwal, Saudi Arabia
Internship at Optimization and Machine Learning Lab	Jul. 2020 – Dec. 2020
KAUST, Supervisor: Peter Richtárik	Thuwal, Saudi Arabia
SUMMER SCHOOLS	
PRAIRIE/MIAI AI Summer School, Links: certificate	5-9 July, 2021

Last updated on May $23^{\rm rd}$ 2022