

ELNUR GASANOV

elnur.gasanov@kaust.edu.sa \diamond <https://elnurgasanov.com>

EDUCATION

Ph.D. in Machine Learning and Optimization

Jan. 2020 - Present

King Abdullah University of Science and Technology
Supervised by Peter Richtárik

Master of Science in Computer Science

Sep. 2018 - Dec. 2019

King Abdullah University of Science and Technology
GPA: 3.67/4.00

Bachelor of Science in Applied Mathematics and Physics

Sep. 2014 - Jun. 2018

Moscow Institute of Physics and Technology (State University)
Average Grade: 8.66/10.00

PUBLICATIONS

Elnur Gasanov, Ahmed Khaled, Samuel Horvath, Peter Richtárik, FedMix: A Simple and Communication-Efficient Alternative to Local Methods in Federated Learning, submitted to NeurIPS 2021

Dmitry Kovalev, Elnur Gasanov, Alexander Gasnikov, Peter Richtárik, Lower Bounds and Optimal Algorithms for Smooth and Strongly Convex Decentralized Optimization Over Time-Varying Networks, submitted to NeurIPS 2021

Elnur Gasanov, Konstantin Mishchenko, Peter Richtárik, ADT SVRG: Asynchronous Delay-Tolerant SVRG, draft
Grigory Malinovsky, Dmitry Kovalev, Elnur Gasanov, Laurent Condat, Peter Richtárik, From Local SGD to Local Fixed-Point Methods for Federated Learning, ICML 2020

Dmitry Kovalev, Eduard Gorbunov, Elnur Gasanov, Peter Richtárik, Stochastic Spectral and Conjugate Descent Methods, NeurIPS 2018

Elnur Gasanov, Anastasia Motrenko, Creation of Approximating Scalogram Description in a Problem of Movement Prediction, Machine Learning and Data Analysis, Vol. 3, #2, 2017

CONFERENCES AND WORKSHOPS

KAUST-Tsinghua-Industry workshop on AI, KAUST, Saudi Arabia, 2019, Poster

Data Science Summer School, Paris, France, 2019, Poster

Optimization and Big Data, KAUST, Saudi Arabia, 2018, Poster

RESEARCH INTERNSHIPS

Visiting MS student

June 2019 - July 2019

University of Grenoble-Alpes, Laboratory Jean Kuntzmann

Supervised by Prof. Jerome Malick and postdoctoral fellow Franck Lutzeler, I worked on an asynchronous lock-free algorithm, derived convergence rates for full and stochastic gradient cases. For the second case, I analyzed the algorithm for both constant and diminishing stepsizes. The results are to be organized into a paper.

HONORS AND REWARDS

Enlarged state academic scholarship, 2017-2018

Abramov fund excellence scholarship, 2014-2017

Governors award, 2012-2014

Prize-winner of All-Russia Physics Olympiad (Regional step, Moscow region, 2012 - 2014)

Prize-winner of All-Russia Maths Olympiad (Regional step, Moscow region, 2012, 2014)

Prize-winner of All-Russia Economics Olympiad (Regional step, Moscow region), 2013
Prize-winner of competition "Future Scientists" (Moscow), physics section

CO-CURRICULAR COURSES AND ACTIVITIES

- Deep Learning Nanodegree, Udacity, 2019
- Topics covered: PyTorch, Convolutional and Recurrent Neural Networks, GAN, Deployment using AWS
 - Taught by Ian Goodfellow, Mat Leonard, Cezanne Comacho
- C++ course White Belt, Coursera, 2018
- Topics covered: Functions and Containers, Classes, Exception Handling, Operator Overloading
 - Taught by specialists from Yandex
- Seminar Co-organizer, All hands meetings on Big Data Optimization, September 2019 - Present
- Co-organizer of a group seminar

SKILLS

Mathematics	Linear Algebra, Theory of Algorithms, Machine Learning, Deep Learning
Programming	C++, Python (NumPy, Matplotlib, PyTorch, Pandas), Matlab, Golang
Tools	MS Office, LaTeX, SQL Server
Languages	Russian C2, English C1

EXTRA CURRICULARS AND HOBBIES

- Hobbies: Fitness, Volleyball, Windsurfing
- Volunteer: National Park Hunsrueck II, Deuselbach, Germany, 2017
- Volunteer: Environment and Legality at Vesuvio National Park, Ottaviano, Italy, 2016
- Volunteer: University "5top100" conference, 2016
- Volunteer: Promoting Biodiversity in Neckertal, Brunnadern SG, Switzerland, 2015