Dmitry **Kovalev**

2225-WS19, Building 1, King Abdullah University of Science and Technology, Thuwal, 23955, Saudi Arabia

☐ +7 905 719 06 98 | ✉ dmitry.kovalev@kaust.edu.sa | ⌂ dmitry-kovalev.com | ⬡ dakovalev1

Education

King Abdullah University of Science and Technology	*Thuwal, Saudi Arabia*
PHD IN COMPUTER SCIENCE	*Jan. 2020 - PRESENT*

King Abdullah University of Science and Technology	*Thuwal, Saudi Arabia*
MS IN COMPUTER SCIENCE	*Sep. 2018 - Dec. 2019*

Moscow Institute of Physics and Technology	*Moscow, Russia*
BSc IN APPLIED MATHEMATICS AND PHYSICS	*Sep. 2014 - Jun. 2018*

Skills

Programming	C/C++, Python, Go
Mathematics	Calculus, Linear Algebra, Probability and Statistics

Honors & Awards

2015-2017	**Abramov's Fund Scholarship**, for top students of Moscow Institute of Physics and Technology	*Moscow, Russia*
2014	**Honourable Mention**, APhO (Asian Physics Olympiad)	*Singapore*
2014	**Prize-Winner**, All-Russian School Physics Olympiad, Final Round	*Saint Petersburg, Russia*
2014	**Winner**, All-Russian School Programming Olympiad, Region Round	*Moscow, Russia*
2014	**Winner**, All-Russian School Math Olympiad, Region Round	*Moscow, Russia*
2012-2014	**Russian President's Scholarship**, for high school students	*Russia*
2012-2014	**Moscow Governor's Scholarship**, for high school students	*Moscow, Russia*
2013	**Winner**, All-Russian School Physics Olympiad, Final Round	*Vladivostok, Russia*
2012	**Prize-Winner**, All-Russian School Physics Olympiad, Final Round	*Saransk, Russia*

Papers

Distributed Fixed Point Methods with Compressed Iterates

SÉLIM CHRAIBI, AHMED KHALED, DMITRY KOVALEV, PETER RICHTÁRIK, ADIL SALIM, MARTIN TAKÁČ   *Dec. 2019*

- arXiv 2019

Stochastic Newton and Cubic Newton Methods with Simple Local Linear-Quadratic Rates

DMITRY KOVALEV, KONSTANTIN MISHCHENKO, PETER RICHTÁRIK   *Dec. 2019*

- NeurIPS 2019 Workshop: Beyond First Order Methods in Machine Learning
- arXiv 2019

Accelerated methods for composite non-bilinear saddle point problem

MOHAMMAD ALKOUSA, DARINA DVINSKIKH, FEDOR STONYAKIN, ALEXANDER GASNIKOV, DMITRY KOVALEV   *Dec. 2019*

- arXiv 2019

Stochastic Proximal Langevin Algorithm: Potential Splitting and Nonasymptotic Rates

ADIL SALIM, DMITRY KOVALEV, PETER RICHTÁRIK   *May 2019*

- NeurIPS 2019

Revisiting Stochastic Extragradient

Konstantin Mishchenko, Dmitry Kovalev, Egor Shulgin, Peter Richtárik, Yura Malitsky *May 2019*

- NeurIPS 2019 Workshop: Bridging Game Theory and Deep Learning
- arXiv 2019
- Accepted to AISTATS 2020

RSN: Randomized Subspace Newton

Robert M. Gower, Dmitry Kovalev, Felix Lieder, Peter Richtárik *May 2019*

- NeurIPS 2019

Stochastic Distributed Learning with Gradient Quantization and Variance Reduction

Samuel Horváth, Dmitry Kovalev, Konstantin Mishchenko, Peter Richtárik, Sebastian U. Stich *Jan. 2019*

- arXiv 2019

Don't Jump Through Hoops and Remove Those Loops: SVRG and Katyusha are Better Without the Outer Loop

Dmitry Kovalev, Samuel Horváth, Peter Richtárik *Jan. 2019*

- arXiv 2019
- Accepted to ALT 2020

A hypothesis about the rate of global convergence for optimal methods (Newton's type) in smooth convex optimization

Alexander Gasnikov, Dmitry Kovalev *Feb. 2018*

- Computer Research and Modeling, 2018, Volume 10, Issue 3, Pages 305–314

Stochastic Spectral and Conjugate Descent Methods

Dmitry Kovalev, Eduard Gorbunov, Elnur Gasanov, Peter Richtárik *Feb. 2018*

- NeurIPS 2018

Conferences & Talks

ICCOPT 2019
TU, Berlin, Germany

Talk: «Revisiting Stochastic Extragradient Method» *5 Aug. 2019*

Data Science Summer School 2019
École polytechnique, Paris, France

Poster: «Stochastic Distributed Learning with Gradient Quantization and Variance Reduction» *26 Jun. 2019*

Traditional School (Control, Information and Otimization)
Voronovo, Moscow Region, Russia

Poster: «Stochastic Distributed Learning with Gradient Quantization and Variance Reduction» *20 Jun. 2019*

Weekly seminar «Automatic control and Optimization Theory»
IPU, Moscow, Russia

Talk: «Stochastic Spectral and Conjugate Descent Methods» *26 Mar. 2019*

Seminar «Modern Optimization Methods»
MIPT, Moscow, Russia

Talk: «Stochastic Distributed Learning with Gradient Quantization and Variance Reduction» *25 Mar. 2019*

Traditional School (Control, Information and Otimization)
Voronovo, Moscow Region, Russia

Poster: «Stochastic Spectral Descent Methods» *Jun. 2018*

Optimization and Big Data Workshop
KAUST, Thuwal, Saudi Arabia

Poster: Stochastic Spectral Descent Methods *Feb. 2018*