

# 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](mailto:dmitry.kovalev@kaust.edu.sa) | 🏠 [dakovalev1.github.io](https://dakovalev1.github.io) | 📱 [dakovalev1](#)

## Education

### King Abdullah University of Science and Technology

MS/PHD IN COMPUTER SCIENCE

*Thuwal, Saudi Arabia*

*Sep. 2018 - PRESENT*

### Moscow Institute of Physics and Technology

BSC IN APPLIED MATHEMATICS AND PHYSICS

*Moscow, Russia*

*Sep. 2014 - Jun. 2018*

## Skills

**Programming** C/C++, Python, LaTeX, 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

### Stochastic Distributed Learning with Gradient Quantization and Variance Reduction

SAMUEL HORVÁTH, DMITRY KOVALEV, KONSTANTIN MISHCHENKO, PETER RICHTÁRIK AND 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 AND PETER RICHTÁRIK

*Jan. 2019*

• [arXiv 2019](#)

### 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 AND PETER RICHTÁRIK

*Feb. 2018*

• [NeurIPS 2018](#)

## Conferences & Talks

---

### Weekly seminar «Automatic control and Optimization Theory»

*Institute for Control Problems,  
Moscow, Russia*

*26 Mar. 2019*

TALK: «STOCHASTIC SPECTRAL AND CONJUGATE DESCENT METHODS»

- [Link 1](#)
- [Link 2](#)

### Seminar «Modern Optimization Methods»

*Moscow Institute of Physics and  
Technology, Moscow, Russia*

*25 Mar. 2019*

TALK: «STOCHASTIC DISTRIBUTED LEARNING WITH GRADIENT QUANTIZATION AND VARIANCE REDUCTION»

- [Link](#)

### Traditional School (Control, Information and Optimization)

*Voronovo, Moscow Region, Russia*

*Jun. 2018*

POSTER PRESENTER: «STOCHASTIC SPECTRAL DESCENT METHODS»

- [School website 1](#)
- [School website 2](#)

### Optimization and Big Data Workshop

*KAUST, Thuwal, Saudi Arabia*

*Feb. 2018*

POSTER PRESENTER: STOCHASTIC SPECTRAL DESCENT METHODS

- [Workshop website](#)
- [Poster](#)