

# Dmitry Grishchenko

Male, 24 July 1994, Russian

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*Looking for: Data Scientist, Operations Research Engineer*

## Education

### Université Grenoble Alpes

**Grenoble**

*Ph.D. in Applied Mathematics*

*Oct. 2017 – Nov. 2020*

**Subject:** Distributed Optimization for Large-Scale Problems

**Supervisors:** F. lutzeler (UGA), M.-R. Amini (UGA), J. Malick (CNRS and LJK)

### Higher School of Economics

**Moscow**

*M.Sc. in Applied Mathematics*

*Sept. 2015 – June 2017*

**Thesis:** Minimal Mutual Information Model Problem

**Supervisor:** A. Gasnikov (MIPT)

### Higher School of Economics

**Moscow**

*B.Sc. in Mathematics*

*Sept. 2011 – June 2015*

**Thesis:** Lattices, Sphere Packing and Number Theory

**Supervisor:** A. Zykin (HSE)

## Publications

**D. Grishchenko**, F. lutzeler, and M.-R. Amini

**Conference**

[Sparse Asynchronous Distributed Learning](#)

*2020*

**ICONIP 2020**

G. Bareilles, Y. Laguel, **D. Grishchenko**, F. lutzeler, J. Malick

**Toolbox + Journal**

[Randomized Progressive Hedging methods for Multi-stage Stochastic Programming](#)

*2020*

**ANOR**

**D. Grishchenko**, F. lutzeler, and J. Malick

**Journal**

[Proximal Gradient Methods with Adaptive Subspace Sampling](#)

*2019*

**MOOR**

A. Ivanova, D. Pasechnyuk, **D. Grishchenko**, E. Shulgin, A. Gasnikov

**Preprint**

[Adaptive Catalyst for Smooth Convex Optimization](#)

*2019*

**D. Grishchenko**, F. lutzeler, J. Malick, and M.-R. Amini

**Journal**

[Asynchronous Distributed Learning with Sparse Communications and Identification](#)

*2018*

To appear in **SIMODS**

F. Hanzley, J. Konecny, N. Loizou, P. Richtarik, **D. Grishchenko**

**Workshop**

[A Privacy Preserving Randomized Gossip Algorithm via Controlled Noise Insertion](#)

*2018*

**PPML NeurIPS 2018**

F. Hanzley, J. Konecny, N. Loizou, P. Richtarik, **D. Grishchenko**

**Preprint**

[Privacy Preserving Randomized Gossip Algorithms](#)

*2017*

**D. Grishchenko**

**Journal**

[Origami: What One Can Get via Paper Folding \(Rus\)](#)

*2013*

Matematicheskoye Prosveshcheniye

## Working Experience

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### Huawei

*Senior Algorithm Engineer (Team Leader)*

*PCB design software*

Leading the Layout PCB team. Writing the geometrical library on C++.

**Moscow**

*Feb. 2021 – Now*

### Huawei (as contractor)

*Senior Engineer*

*PCB design software*

Writing the geometrical library on C++.

**Moscow**

*Aug. 2020 – Feb. 2021*

### Altium

*Software Developer*

*PCB design software*

Writing the topological tracer library on C++. Establishing and maintaining geometric library. Working with Boost C++ library, unit-tests.

**Moscow**

*Jan. 2016 – Sept. 2017*

### Citibank

*Intern in Decision Management Unit*

*Help in creating new products passports*

Maintaining an online passports creator via MS Sharepoint and SQL.

**Moscow**

*July 2014 – Feb. 2015*

### The Tournament of Towns

*Mathematical Olympiad Works Inspector*

*Check the correctness of the solutions*

Reading and assessing the works of the high school students.

**Moscow**

*Oct. 2011 – May 2015*

## Certificates

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### Algorithmic Toolbox

**Coursera**

*2016*

*An online non-credit course authorized by University of California, San Diego and Higher School of Economics and offered through Coursera.*

## Summer Schools and Research Visits

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**Research Visit; Adviser: P. Richtarik**

**KAUST, Thuwal**

*2019*

**ICCOPT 2019 Summer School**

**Berlin**

*2019*

**Mini-cours "optimisation et apprentissage: applications en vision"**

**Autrans**

*2018*

**Research Visit; Adviser: P. Richtarik**

**KAUST, Thuwal**

*2017*

## Languages

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**Russian:** Native

**English:** Fluent

**French:** Basic

## Teaching Experience

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### Université Grenoble Alpes

Teaching assistant

Grenoble

Sept. 2018 – May 2020

- 2019–2020
  - Matrix Analysis and Numerical Optimization (20h)
  - Optimisation Numérique (30h)
- 2018–2019
  - Matrix Analysis and Numerical Optimization (20h)
  - Convex and Distributed Optimization (20h)
  - Optimisation Numérique (20h)

## Programming skills

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C++: STL, Boost

Python: numpy, spark, mpi4py, scipy,...

other: Julia,  $\text{\LaTeX}$ , Markdown

## Presentations

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### Conferences and Workshops.....

#### MOTOR 2021

online

[Talk](#)

2021

Proximal Gradient Methods with Adaptive Subspace Sampling

#### ICONIP 2020

online

[Talk](#)

2020

Sparse Asynchronous Distributed Learning

#### ICCOPT 2019

Berlin

[Talk](#)

2019

Identification-Based First-Order Algorithms for Distributed Learning

#### SPARS 2019

Toulouse

[Poster](#)

2019

Distributed First-Order Optimization with Tamed Communications

#### OSL 2019

Les Houches

[Poster](#)

2019

Identify and Sparsify: Distributed Optimization with Asynchronous Moderate Communications

#### ISMP 2018

Bordeaux

[Talk](#)

2018

Distributed Optimization with Sparse Communications and Structure Identification

#### Grenoble Optimization Days 2018

Grenoble

[Talk](#)

2018

Distributed Optimization with Sparse Communications and Structure Identification

#### Journées SMAI-MODE 2018

Autrans

[Poster](#)

2018

Distributed Optimization with Sparse Communications

#### 59<sup>th</sup> MIPT scientific conference

Moscow

[Talk](#)

2016

Solving of Minimal Mutual Information Model Problem via Regularization of Dual Problem and Using Ellipsoid Method with Inexact Oracle

## Other.....

<b>Ph.D. defence</b>	<b>Grenoble</b>
<a href="#">Talk</a>	2020
Proximal Optimization with Automatic Dimension Reduction for Large Scale Learning.	
<b>Grenoble Optimization Reading Group</b>	<b>Grenoble</b>
<a href="#">Talk</a>	2019
Accelerated Distributed Optimization with Asynchronous Moderate Communications	
<b>DAO team seminar</b>	<b>Grenoble</b>
<a href="#">Talk</a>	2019
Identify and Sparsify: Distributed Optimization with Asynchronous Moderate Communications	
<b>Demi-journée des doctorants 2018</b>	<b>Grenoble</b>
<a href="#">Talk</a>	2018
Randomized Proximal Algorithm with Automatic Dimension Reduction	

## Scholarships and Grants

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<b>PGMO - PRMO</b>	
<i>Distributed Optimization on Graphs with Flexible Communications, 5k euro</i>	2019-2020
Together with F. lutzeler (LJK, Grenoble)	

## Hobbies

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In free time I like to solve different [logic puzzles](#). I was a member of Russia main team in the World Championships 2016 – 19. Winner of two Russian Puzzles Championships 2015, 2017, Moscow Cup 2017, and CIS Puzzles Championship 2018. I am also interested in playing Russian and International checkers, where I achieved the title of Candidate Master of Sports. I also like hiking, snowboarding, swimming, and playing football and basketball.