Dmitry Grishchenko

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Education

Université Grenoble Alpes — **Grenoble**
Ph.D. in Applied Mathematics — *2017–now*
Subject: *Distributed Optimization for Large-Scale Problems*
Supervisors: *F. Iutzeler (UGA), M.-R. Amini (UGA), J. Malick (CNRS and LJK)*

Higher School of Economics — **Moscow**
M.Sc. in Applied Mathematics — *2015–2017*
Thesis: *Minimal Mutual Information Model Problem*
Supervisor: *A. Gasnikov (MIPT)*

Higher School of Economics — **Moscow**
B.Sc. in Mathematics — *2011–2015*
Thesis: *Lattices, Sphere Packing and Number Theory*
Supervisor: *A. Zykin (HSE)*

Publications

G. Bareilles, Y. Laguel, **D. Grishchenko**, F. Iutzeler, J. Malick — **Toolbox**
Randomized Progressive Hedging methods for Multi-stage Stochastic Programming — *2020*
Under review in **ANOR**

D. Grishchenko, F. Iutzeler, and J. Malick — **Preprint**
Proximal Gradient Methods with Adaptive Subspace Sampling — *2019*
Under review in **MOOR**

A. Ivanova, D. Pasechnyuk, **D. Grishchenko**,E. Shulgin, A. Gasnikov — **Preprint**
Adaptive Catalyst for Smooth Convex Optimization — *2019*

D. Grishchenko, F. Iutzeler, J. Malick, and M.-R. Amini — **Preprint**
Asynchronous Distributed Learning with Sparse Communications and Identification — *2018*

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

Scholarships and Grants

PGMO - PRMO
Distributed Optimization on Graphs with Flexible Communications, 5k euro — *2019-2020*

Together with F. Iutzeler (LJK, Grenoble)

Summer Schools and Research Visits

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*

Teaching Experience

Université Grenoble Alpes — **Grenoble**
Teaching assistant — *2018–now*

- 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)

Working Experience

Altium — **Moscow**
Software Developer — *2016–2017*
PCB design software
Writing the topological tracer library on C++. Establishing and maintaining geometric library. Working with Boost C++ library, unit-tests.

Citibank — **Moscow**
Intern in Decision Management Unit — *2014–2015*
Help in creating new products passports
Maintaining an online passports creator via MS Sharepoint and SQL.

The Tournament of Towns — **Moscow**
Mathematical Olympiad Works Inspector — *2011–2015*
Check the correctness of the solutions
Reading and assessing the works of the high school students.

Languages

Russian: Native
English: Fluent
French: Basic

Python: numpy, spark, mpi4py, scipy,...
C++: STL, Boost
knowledge of: **Julia**, **LaTeX**, **Markdown**

Certificates

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.

Presentations

Conferences and Workshops

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^{th} **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

Grenoble Optimization Reading Group **Grenoble**
Talk *2019*
Accelerated Distributed Optimization with Asynchronous Moderate Communications

DAO team seminar **Grenoble**
Talk *2019*
Identify and Sparsify: Distributed Optimization with Asynchronous Moderate Communications

Demi-journée des doctorants 2018 **Grenoble**
Talk *2018*
Randomized Proximal Algorithm with Automatic Dimension Reduction