# **Dmitry Grishchenko** LJK, Bâtiment IMAG, Off. 132, 700 Avenue Centrale

38401, Saint-Martin-d'Hères, France

## **Education**

| Université Grenoble Alpes Ph.D. in Applied Mathematics Subject: Distributed Optimization for Large-Scale Problems Supervisors: F. lutzeler (UGA), MR. Amini (UGA), J. Malick (CNRS and LJK) | Grenoble<br>2017-now |                                                                                                                           |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------|-----------|
|                                                                                                                                                                                             |                      | Higher School of Economics                                                                                                | Moscow    |
|                                                                                                                                                                                             |                      | M.Sc. in Applied Mathematics <b>Thesis:</b> Minimal Mutual Information Model Problem <b>upervisor:</b> A. Gasnikov (MIPT) | 2015–2017 |
|                                                                                                                                                                                             |                      |                                                                                                                           |           |
| B.Sc. in Mathematics                                                                                                                                                                        | 2011–2015            |                                                                                                                           |           |
| Thesis: Lattices, Sphere Packing and Number Theory                                                                                                                                          |                      |                                                                                                                           |           |
| upervisor: A. Zykin (HSE)                                                                                                                                                                   |                      |                                                                                                                           |           |
| Publications                                                                                                                                                                                |                      |                                                                                                                           |           |
| D. Grishchenko, F. lutzeler, and J. Malick                                                                                                                                                  | Preprint             |                                                                                                                           |           |
| Proximal Gradient Methods with Adaptive Subspace Sampling                                                                                                                                   | 2019                 |                                                                                                                           |           |
| Under review in MOOR                                                                                                                                                                        |                      |                                                                                                                           |           |
| A. Ivanova, <b>D. Grishchenko</b> , A. Gasnikov, E. Shulgin                                                                                                                                 | Preprint             |                                                                                                                           |           |
| Adaptive Catalyst for smooth convex optimization                                                                                                                                            | 2019                 |                                                                                                                           |           |
| D. Grishchenko, F. lutzeler, J. Malick, and MR. Amini                                                                                                                                       | Preprint             |                                                                                                                           |           |
| Asynchronous Distributed Learning with Sparse Communications and Identification                                                                                                             | 2018                 |                                                                                                                           |           |
|                                                                                                                                                                                             |                      |                                                                                                                           |           |
| F. Hanzley, J. Konecny, N. Loizou, P. Richtarik, <b>D. Grishchenko</b>                                                                                                                      | Workshop             |                                                                                                                           |           |
| A Privacy Preserving Randomized Gossip Algorithm via Controlled Noise Insertion                                                                                                             | 2018                 |                                                                                                                           |           |
| PPML NeurIPS 2018                                                                                                                                                                           |                      |                                                                                                                           |           |
| F. Hanzley, J. Konecny, N. Loizou, P. Richtarik, <b>D. Grishchenko</b>                                                                                                                      | Preprint             |                                                                                                                           |           |
| Privacy Preserving Randomized Gossip Algorithms                                                                                                                                             | 2017                 |                                                                                                                           |           |
| D. Grishchenko                                                                                                                                                                              | Journal              |                                                                                                                           |           |
| Origami: What One Can Get via Paper Folding (Rus)                                                                                                                                           | 2013                 |                                                                                                                           |           |
| Matematicheskoye Prosveshcheniye                                                                                                                                                            | 2010                 |                                                                                                                           |           |
| iviatematicheskoye i rosveshenemye                                                                                                                                                          |                      |                                                                                                                           |           |
| Scholarships and Grants                                                                                                                                                                     |                      |                                                                                                                           |           |
| PGMO - PRMO                                                                                                                                                                                 |                      |                                                                                                                           |           |
| Distributed Optimization on Graphs with Flexible Communications, 5k euro                                                                                                                    | 2019-2020            |                                                                                                                           |           |
| Together with F. lutzeler (LJK, Grenoble)                                                                                                                                                   |                      |                                                                                                                           |           |
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### **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

2018-now

## **Teaching Experience**

Université Grenoble Alpes Grenoble

Teaching assistant

o 2019-2020

- Matrix Analysis and Numerical Optimization (20h)

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

**English**: Fluent C++: STL, Boost

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

Identify and Sparsify: Distributed Optimization with Asynchronous Moderate Communications

Demi-journée des doctorants 2018

Talk

Grenoble

2018

Randomized Proximal Algorithm with Automatic Dimension Reduction