Dmitrii M. Ostrovskii **Curriculum Vitæ (October 20, 2020)**

CONTACT INFORMATION

University of Southern California
Viterbi School of Engineering
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WEBSITE

ostrodmit.github.io

RESEARCH INTERESTS

- Statistical learning theory
- Robust and adaptive estimation
- Convex and non-convex optimization and minimax problems

CURRENT POSITION

Postdoctoral Scholar – Research Associate *Aug. 2019 – present*
University of Southern California
Host: Meisam Razaviyayn

PREVIOUS POSITIONS

ERCIM Alain Bensoussan Postdoctoral Fellow *Feb. 2018 – Jun. 2019*
Inria (Paris) and CWI (Amsterdam)
Hosts: Francis Bach, Peter Grünwald

Visiting Student, Univ. of Washington *Dec. 2016 – May 2017*
Host: Zaid Harchaoui

DEGREES

PhD, Université Grenoble Alpes *Oct. 2014 – Jan. 2018*

- Thesis: *Adaptive Signal Recovery by Convex Optimization*
  Advisers: Anatoli Juditsky, Zaid Harchaoui, Laurent Desbat

MSc, Moscow Institute of Physics and Technology *Sep. 2012 – Jul. 2014*

- Thesis: *Concentration Inequalities for the Exponential Weighting Method*
  Adviser: Yuri Golubev

BSc, Moscow Institute of Physics and Technology *Sep. 2008 – Jul. 2012*

- Thesis: *Analytical Study of NHDP Link Management Protocol*
  Adviser: Andrey Lyakhov

PREPRINTS AND WORKING PAPERS

Do Your Training Data Violate My Privacy? Near-Optimal Model Discrimination with Privacy Awareness
D. Ostrovskii, M. Ndaoud, A. Javanmard, M. Razaviyayn. *Available upon request, 2020*

Efficient Search of First-Order Nash Equilibria in Nonconvex-Concave Smooth Min-Max Problems
D. Ostrovskii, A. Lowy, M. Razaviyayn. *arXiv:2002.07919, 2020*
SIAM Journal on Optimization, in review (min. rev.)

Efficient Primal-Dual Algorithms for Large-Scale Multiclass Classification
D. Babichev, D. Ostrovskii, F. Bach. *arXiv:1902.03755, 2019*

Finite-Sample Analysis of M-Estimators using Self-Concordance
D. Ostrovskii, F. Bach. *arXiv:1810.06838, 2018*
Electronic Journal of Statistics, in review (min. rev.)

Adaptive Denoising of Signals with Shift-Invariant Structure
D. Ostrovskii, Z. Harchaoui, A. Judistky, A. Nemirovski. *arXiv:1806.04028, 2018*

Structure-Blind Deconvolution via Convex Optimization
D. Ostrovskii, A. Juditsky. *Available upon request, 2018*

Conference Publications

Affine Invariant Covariance Estimation for Heavy-Tailed Distributions
D. Ostrovskii, A. Rudi. *arXiv:1902.03086, COLT 2019*

Beyond Least-Squares: Fast Rates for Regularized Empirical Risk Minimization through Self-Concordance
U. Marteau-Ferey, D. Ostrovskii, A. Rudi, F. Bach. *arXiv:1902.03046, COLT 2019*

Efficient First-Order Algorithms for Adaptive Signal Denoising
D. Ostrovskii, Z. Harchaoui. *arXiv:1803.11262, ICML 2018*

Structure-Blind Signal Recovery
D. Ostrovskii, Z. Harchaoui, A. Juditsky, A. Nemirovski. *arXiv:1607.05712, NeurIPS 2016*

Adaptive Recovery of Signals by Convex Optimization
Z. Harchaoui, A. Juditsky, A. Nemirovski, D. Ostrovskii. *hal:01250215, COLT 2015*

Dynamic Resource Allocation for MCCA-Based Streaming in Wi-Fi Mesh Networks
E. Khorov, A. Krasilov, A. Lyakhov, D. Ostrovskii. *WiFlex 2013*

Analytical Study of Neighborhood Discovery and Link Management in OLSR
E. Khorov, A. Kiryanov, A. Lyakhov, D. Ostrovskii *IFIP 2012*

Journal Publications

Concentration Inequalities for the Exponential Weighting Method
Y. Golubev, D. Ostrovskii. *Mathematical Methods of Statistics, 23:1, 2014, pp. 20-37*

A Dynamic Channel Reservation Method for Multimedia Streaming in Wi-Fi Mesh Networks
A. Krasilov, A. Lyakhov, D. Ostrovskii, E. Khorov. *Automation and Remote Control, 74:9, 2013, pp. 1460-1473*

Analytical Study of the Quality of Links Established by the Neighbourhood Discovery Protocol
A. Lyakhov, D. Ostrovskii, E. Khorov. *Journal of Communications Technology and Electronics, 57:12, 2012, pp. 1314-1321*

Service

- **Journal reviewing:** JMLR, Mathematical Programming
- **Conference reviewing:** NeurIPS (in top reviewers), ICML, COLT, ALT
- **Workshop organized:** Khronos-Persyvact Spring School 2015, Grenoble

Teaching

- 2019–2020: Invited lectures, Optimization for Machine Learning class USC
- 2015–2017: Calculus for science & engineering (French) Univ. Grenoble Alpes
- 2015–2016: Statistical methods in biology (French) Univ. Grenoble Alpes

Talks

2019

- University of Southern California, Epstein Seminar
  On Fast Rates in Empirical Risk Minimization Beyond Least-Squares
- COLT 2019, Phoenix
  Optimization and Statistical Learning workshop, Les Houches (**poster**)
  Affine Invariant Covariance Estimation for Heavy-Tailed Distributions
- Toyota Technological Institute at Chicago
  Algorithmic Efficiency and Statistical Optimality in Empirical Risk Minimization

2018

- ICML 2018, Stockholm (**poster**)
  Optimization and Learning workshop, Toulouse (**poster**)
  CWI–Inria Workshop, Paris
  Finite-Sample Analysis of M-Estimators Using Self-Concordance
- ICML 2018, Stockholm
  Efficient First-Order Algorithms for Adaptive Signal Denoising
- CWI seminar, Amsterdam
  SIERRA Team seminar, INRIA, Paris
  PhD Thesis Defense, Univ. Grenoble Alpes
  Adaptive Signal Recovery by Convex Optimization

2015–2017

- NeurIPS 2016, Barcelona (**poster**)
  Structure-Blind Signal Recovery
- Univ. Grenoble Alpes
  IMS, University of Göttingen
  IRIT, Toulouse
  ORFE, Princeton
  University of Washington, Seattle
  PGMO Days 2016, Paris
  COLT 2015, Paris
  Adaptive Signal Denoising by Convex Optimization

Scientific schools

Structural Inference 2016, Brodten
GPU for Signal and Image Processing 2015, Grenoble
Machine Learning Summer School 2015, Kyoto
Khronos-Persyvact Spring School at *Statlearn* 2015 workshop, Grenoble
Microsoft School on Algorithms for Massive Data 2013, Moscow

Honors

NeurIPS 2019 Free Registration (awarded to 400 highest-scoring reviewers)
COLT 2019 Travel Award
HDSI Postdoctoral Felloship at UC San Diego, 2019–2021 (declined)
ERCIM Alain Bensoussan Postdoctoral Fellowship, 2018–2019 (completed)
NIPS 2016 Travel Award
Increased State Academic Scholarship of the Russian Government, 2012–2014
Abramov-Frolov Fund Scholarship, 2009–2011

Other Activities

Mathematical blog: `https://ostrodmit.github.io/blog`

Language Skills

English (proficient)
French (fluent)
Russian (native)
German (basic)