

CONTACT INFORMATION	Georgia Institute of Technology School of Mathematics H. Milton Stewart School of Industrial & Systems Engineering (ISyE) Office: Skiles 263 Phone: (+1) 213 255 6724 Email: ostrov@gatech.edu
WEBSITE	ostrodmitt.github.io
OTHER LINKS:	Scholar • GitHub • YouTube
RESEARCH INTERESTS	<ul style="list-style-type: none"> • <i>Optimization theory:</i> nonconvex minimax problems; acceleration under non-Euclidean geometries. • <i>Learning theory:</i> fast rates in statistical and online learning; applications of self-concordance. • <i>Mathematical statistics:</i> high-dimensional, robust, and adaptive estimation and hypothesis testing. • <i>Information theory:</i> information-theoretic techniques in optimization, statistics, combinatorics. • <i>Signal processing:</i> sparse recovery; super-resolution; estimation with shift-invariant structure.
CURRENT POSITION	<p>Tenure-Track Assistant Professor since 08/2023 Georgia Tech – School of Mathematics ($\times 2/3$) Georgia Tech – H. Milton Stewart School of Industrial and Systems Engineering ($\times 1/3$)</p>
PREVIOUS POSITIONS	<p>Assistant Professor of Mathematics 08/2021–07/2023 U. of Southern California – Department of Mathematics (promoter: Stanislav Minsker)</p> <p>Postdoctoral Scholar 08/2019–08/2021 U. of Southern California – Viterbi School of Engineering (host: Meisam Razaviyayn)</p> <p>ERCIM Alain Bensoussan Postdoctoral Fellow 02/2018–06/2019 INRIA Research Center in Paris – SIERRA Project-Team (host: Francis Bach)</p>
DEGREES	<p>PhD – Université Grenoble Alpes 10/2014–01/2018 Thesis: <i>Adaptive Signal Recovery by Convex Optimization</i> Advisors: Anatoli Juditsky, Zaid Harchaoui (University of Washington)</p> <p>MSc – Moscow Institute of Physics and Technology 09/2012–08/2014 Thesis: <i>Concentration Inequalities for the Exponential Weighting Method</i> Advisor: Yuri Golubev (Univ. Aix-Marseille, IITP RAS)</p> <p>BSc – Moscow Institute of Physics and Technology 09/2008–08/2012 Thesis: <i>Analytical Study of NHD P Link Management Protocol</i> Advisors: Andrey Lyakhov & Evgeny Khorov (IITP RAS)</p>

PREPRINTS

Amplitude Maximization in Stable Systems, Schur Positivity, and Some Conjectures on Polynomial Interpolation

D. Ostrovskii, P. Shcherbakov [arXiv:2508.13554](#), 2025

Efficient Network Reconfiguration by Randomized Switching

S. Talkington, D. Ostrovskii, D. Molzahn [PDF], 2025

Admittance Matrix Concentration Inequalities for Uncertain Power Networks

S. Talkington, C. Khanpour, R. Gupta, S. Dorado-Rojas, D. Turizo, H. Park, D. Ostrovskii, D. Molzahn [arXiv:2510.17798](#), 2025

Near-Optimal and Tractable Estimation under Shift-Invariance

D. Ostrovskii [arXiv:2411.03383](#), 2024

Nonconvex-Nonconcave Min-Max Optimization with a Small Maximization Domain

D. Ostrovskii, B. Barazandeh, M. Razaviyayn [arXiv:2110.03950](#), 2021

Near-Optimal Procedures for Model Discrimination with Non-Disclosure Properties

D. Ostrovskii, M. Ndaoud, A. Javanmard, M. Razaviyayn [arXiv:2012.02901](#), 2020

Efficient Primal-Dual Algorithms for Large-Scale Multiclass Classification

D. Babichev, D. Ostrovskii, F. Bach [arXiv:1902.03755](#), 2019

BOOK CHAPTER

Adaptive Denoising of Signals with Shift-Invariant Structure

D. Ostrovskii, Z. Harchaoui, A. Juditsky, A. Nemirovski [arXiv:1806.04028](#)
Foundations of Modern Statistics: V. Spokoiny's 60th Anniversary Festschrift

JOURNAL PAPERS

Efficient and Near-Optimal Online Portfolio Selection

R. Jézéquel, D. Ostrovskii, P. Gaillard [arXiv:2209.13932](#)
Mathematics of Operations Research, 2025 (to appear)

Efficient Search of First-Order Nash Equilibria in Nonconvex-Concave Smooth Min-Max Problems

D. Ostrovskii, A. Lowy, M. Razaviyayn [arXiv:2002.07919](#)
SIAM Journal on Optimization, 31:4, pp. 2508-2538, 2021

Finite-Sample Analysis of M-Estimators Using Self-Concordance

D. Ostrovskii, F. Bach [arXiv:1810.06838](#)
Electronic Journal of Statistics, 15:1, pp. 326-391, 2021

Concentration Inequalities for the Exponential Weighting Method

Y. Golubev, D. Ostrovskii [hal-01292413](#)
Mathematical Methods of Statistics, 23:1, pp. 20-37, 2014

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, pp. 1460-1473, 2013

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, pp. 1314-1321, 2012

REFEREED
CONFERENCE
PAPERS

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

REVIEWING

Journals: Math. Programming (MAPR), SIAM J. on Optimization (SIOPT), Ann. of Statist. (AoS), IEEE Trans. on Inform. Theory (IEEE-IT), Math. of Operations Research (MOR), J. of Machine Learning Research (JMLR), Computational Optim. & Appl. (COAP), Optim. Methods & Software (OMS), J. of Computational & Graphical Statistics (JCGS). **Conferences** (*occasionally*): NeurIPS, ICML, STOC, COLT, ALT.

TEACHING

Georgia Tech:

2025, Fall:	High-Dimensional Statistics (Math 7252)	15× $\frac{1}{2}$, 2.5 hrs/wk
2025, Spg:	Special Topics in Mathematical Data Science (ISyE 8803)	2.5 hrs/wk
2024, Fall:	Differential Equations (Math 2552)	100× $\frac{1}{2}$, 2 hrs/wk
2024, Spg:	Statistical Estimation (Math 6262)	2.5 hrs/wk
2023, Fall:	Introduction to Linear Algebra (Math 1553)	100× $\frac{1}{2}$, 2 hrs/wk

University of Southern California:

2023, Spg:	Analysis of Variance and Regression (Math 542)	3 hrs/wk
2022, Fall:	Introduction to Mathematical Statistics (Math 541b)	15× $\frac{1}{2}$, 3 hrs/wk
2022, Smr:	Linear Algebra and Differential Equations (Math 225)	12× $\frac{1}{2}$, 6 hrs/wk
2022, Spg:	Elementary Probability and Statistics (Math 208)	34× $\frac{1}{2}$, 3 hrs/wk
2021, Fall:	Introduction to Mathematical Statistics (Math 541b)	10× $\frac{1}{2}$, 3 hrs/wk
2019–2021:	Optimization for Machine Learning (invited lectures)	10× $\frac{1}{2}$, 2 hrs/mo

Université Grenoble Alpes (in French):

2017, Spg:	Calculus for Science and Engineering (“Cours-TD”)	30× $\frac{1}{2}$, 3 hrs/wk
2016, Spg:	Calculus for Science and Engineering (“Cours-TD”)	30× $\frac{1}{2}$, 3 hrs/wk
2016, Spg:	Statistical Methods for Biology & Medicine (“TP”)	28× $\frac{1}{2}$, 3 hrs/wk

ORGANIZATION	<u>GT Stochastics Seminar (co-organizer, since Fall 2024)</u>	
	Speakers: Gil Kur (ETH Zurich), Stas Minsker (USC), Anatoli Juditsky (Grenoble), Alex Goldenshluger (Haifa), Elizaveta Rebrova (Princeton), Yair Shenfeld (Brown), Alex Wein (UC Davis), Chandan Tankala (U. Oregon), Jacob Aguirre (GT).	
	<u>GT Mathematics Colloquium (2023–2024, occasionally)</u>	
	Speakers: Wenjing Liao (Georgia Tech), Suvrit Sra (MIT)	
	<u>GT ISyE Seminar (2023–2024, occasionally)</u>	
	Speakers: Nikita Zhivotovskiy (Berkeley), Victor de la Peña (Columbia)	
	<u>USC Probability & Statistics Seminar (2022–2023, main organizer)</u>	
	Speakers: Mateo Díaz (Caltech), Misha Belkin (UCSD), Robi Bhattacharjee (UCSD), Yian Ma (UCSD), Qiyang Han (Rutgers), Masoud Zargar (USC), Andrew Lowy (USC)	

REU PROGRAM Michael Zuo (Summer 2024)

LONG-TERM VISITS	Université Grenoble Alpes – Anatoli Juditsky, Roland Hildebrand	12/2022–01/2023
	Centrum Wiskunde & Informatica – Peter Grünwald ($\times 2$)	06/2018, 06/2019
	University of Washington – Zaid Harchaoui	12/2016–05/2017

TALKS¹

2025	<hr/>	
	TBA: Kent State University – Analysis Seminar (group of F. Nazarov)	i
	TBA: Georgia Tech, School of Mathematics – Analysis Seminar	
	Georgia Tech, School of Mathematics – Research Horizons Seminar	
	Auburn University – High-Dimensional Statistics Seminar	i
	Georgia Tech, ISyE Faculty Seminar for PhD students	
	Georgia Tech, School of Mathematics – Probability Working Seminar ($\times 3$ series)	i
	ICCOPT 2025, Los Angeles	i, s
	Georgia Tech, School of Mathematics – Joint Stochastics & Analysis Seminar	
2023	<hr/>	
	SIAM Conference on Optimization 2023, Seattle	i
	Georgia Tech, School of ISyE – Job Candidate Seminar	i, j
	ENSAE, Paris – Job Candidate Seminar	j, z
	Toulouse School of Economics – Job Candidate Seminar	i, j
	Georgia Tech, School of Mathematics – Job Candidate Seminar	i, j
	Optimization and Statistical Learning 2023, Les Houches	i
2022	<hr/>	
	Meeting in Mathematical Statistics 2022, Luminy	i
	CNRS AI Rising Talents – Job Interview (selected among the top 3)	j, z
	INFORMS Annual Meeting, Indianapolis	i
	Georgia Tech – Stochastic Seminar	i
	Georgia Tech – ISyE 8813 Guest Lecture	i, z

¹Legend: i – invited talk, z – via Zoom, p – poster presentation, j – job talk, s – session chaired.

Statistical Inference and Convex Optimization (SICO 2022), Grenoble	i,z
University of Southern California – Mathematical Finance Colloquium	
École Polytechnique, Paris	j,z
INFORMS Optimization Society Conference (IOS 2022), Greenville	s
Johns Hopkins University – AMS Seminar	j,z
University of Cambridge – StatLab Seminar	j,z

2021

University of Washington – IFDS seminar	i,z
Johns Hopkins University – AMS seminar	i
Southern California Probability Symposium (SCPS 2021)	i,z
Higher School of Economics, Moscow	i
Universitat Pompeu Fabra, Barcelona	j,z
EPFL, Institute of Mathematics	j,z
Weierstrass Institute, Berlin	i,z
École Polytechnique, Paris (×2)	j,z

2018–2020

University of Southern California – Epstein Seminar	
COLT 2019, Phoenix	
Optimization and Statistical Learning 2019, Les Houches	p
Toyota Technological Institute, Chicago	j
ICML 2018, Stockholm	p
Optimization and Learning Workshop 2018, Toulouse	p
CWI-Inria workshop 2018, Paris	
ICML 2018, Stockholm	
CWI seminar, Amsterdam	
SIERRA team seminar, INRIA Paris	
PhD defense, Université Grenoble Alpes	

2015–2017

Optimization Without Borders 2017, Les Houches	
NeurIPS 2016, Barcelona	p
Université Grenoble Alpes	
University of Göttingen	j
IRIT, Toulouse	j
Princeton – ORFE Seminar	j
University of Washington, Seattle	
PGMO Days 2016, Paris	
COLT 2015, Paris	
StatLearn 2015, Grenoble	

**HONORS
& AWARDS**

NeurIPS 2019 Best Reviewer (awarded to 400 reviewers out of 4500+)
 COLT 2019 Travel Award
 HDSI Postdoctoral Fellowship at UC San Diego, 2019–2021 (declined)
 ERCIM Alain Bensoussan Postdoctoral Fellowship, 2018–2019
 NVIDIA GPU Grant, 2017
 NIPS 2016 Travel Award
 Abramov-Frolov Fund Scholarship, 2009–2011

LANGUAGES

English

- quasi-bilingual proficiency

French

- fluent

Russian

- mother tongue

German

- intermediate