

Aleksandr Zimin

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D.O.B. August 24, 1997

Education

- 2021–now **PhD in Mathematics**, *Massachusetts Institute of Technology*.
- 2019–2021 **Master degree**, *Faculty of Mathematics, HSE University, Moscow*.
 - GPA: 10/10
 - My term paper **On existence of measure with given marginals supported on a hyperplane** won the first price at Student Research Paper Competition held by HSE University
- 2019–2021 **Master degree**, *Mathematical and Theoretical Physics, Skolkovo Institute of Science and Technology, Moscow*.
 - GPA: 5/5
- 2015–2019 **Bachelor degree**, *Faculty of Mathematics, HSE University, Moscow*.
 - Diploma with the Highest Distinction
 - GPA: 9.79/10
 - Thesis: **Duality Theory for Multistochastic Monge-Kantorovich Problem** – Final Grade: 10

Other education

- 2017–2019 **Professional retraining diploma**, *Department «Computer science», Yandex School of Data Analysis, Moscow*.
 - 672 lecture hours on a broad range of theoretical and applied Computer Science

Internships

- 2018 **Yandex**, Backend API development for advertisement algorithms.
- 2019 **Huawei**, Adaptation of face recognition model for the European market.

Research experience

- 2018– Research assistant, International Laboratory of Stochastic Algorithms and High-Dimensional Inference, HSE University
- 2019, 2021 Teaching assistant for the course "Linear programming", Faculty of Mathematics, HSE University

Programming skills

- C++ Learning C++, Parts 1/2, *Yandex School of Data Analysis*, Grade: 5/5
- Python Programming in Python, *Yandex School of Data Analysis*, Grade: 5/5
Basics of Programming in Python-2, *HSE University*, 10/10
- Numerical Methods Fast Methods for PDEs and IEs, *MIT Mathematics*, A+
- ML Skills in different fields of machine learning like deep learning, reinforcement learning, natural language processing, and computer vision.

Working papers under revision

Boerma J., Tsyvinski A., Zimin A.P., Bunching and Taxing Multidimensional Skills. **Revision requested by Econometrica**, 2022 DOI: [10.3386/w30015](https://doi.org/10.3386/w30015)

Kolesnikov A., Sandomirskiy F., Tsyvinski A., Zimin A.P., Beckmann's approach to multi-item multi-bidder auctions. [arxiv: 2010.07263](https://arxiv.org/abs/2010.07263)

Boerma J., Tsyvinski A., Zimin A.P., Sorting with Team Formation. **Revision requested by Journal of Political Economy**, 2021 DOI: [10.3386/w29290](https://doi.org/10.3386/w29290)

Zimin A.P., On existence of measure with given marginals supported on a hyperplane. [arXiv: 2010.07263](https://arxiv.org/abs/2010.07263)

Other working papers and publications

Gladkov N.A., Kolesnikov A.V., Zimin A.P., The multistochastic Monge-Kantorovich problem / **Journal of Mathematical Analysis and Applications**. 2020 DOI: [10.1016/j.jmaa.2021.125666](https://doi.org/10.1016/j.jmaa.2021.125666)

Gladkov N.A., Zimin A.P., An explicit solution for a multimarginal mass transportation problem. **SIAM Journal on Mathematical Analysis**, 2020 DOI: [10.1137/18M122707X](https://doi.org/10.1137/18M122707X)

Gladkov N.A., Kolesnikov A.V., Zimin A.P., On multistochastic Monge-Kantorovich problem, bitwise operations, and fractals. **Calculus of Variations and Partial Differential Equations**. 2019 DOI: [10.1007/s00526-019-1610-4](https://doi.org/10.1007/s00526-019-1610-4)

Participation in conferences

- April 2023 Speaker at the Fields Institute Colloquium on Applied Math, University of Toronto
- April 2023 Speaker at the Seminar Series in Actuarial Science and Financial Mathematics, University of Waterloo
- August 2022 Speaker at the Microeconomic Theory Workshop, Yale University
- July 2021 International Conference on Machine Learning, Baltimore
- May 2021 New Frontiers in High-Dimensional Probability and Applications to Machine Learning, Sochi
- February 2020 Math of Machine Learning, Sirius University of Science and Technology
- October 2019 Recent advances in mass transportation, HSE
- March 2019 Workshop on optimal transport and applications, Université de Toulouse
- February 2019 New frontiers in high-dimensional probability and statistics, HSE

Participation in olympiads

- 2015 International Mathematical Olympiad — national team member, silver medal
- 2011–2015 All-Russian Mathematical Olympiads — prize-winner
- 2018 ACM-ICPC (The International Collegiate Programming Contest) – World Finals, team HSE Bluebell
- 2015 Romanian Master in Mathematics — national team member, gold medal
- 2013 China National Olympiad in Mathematics — national team member, gold medal