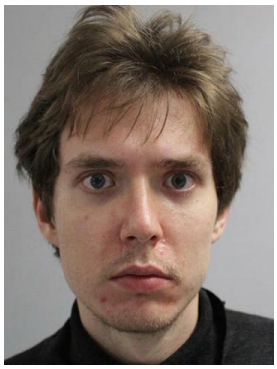
curriculum vitae



Alexander Kozachinskiy

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Education and Degrees

2015-2019	Ph.D. in Mathematics. Lomonosov Moscow State University. **Adviser**: Nikolay Vereschagin. **Thesis**: *Comparison of communication, information and decision tree complexities.*
2010-2015	Specialist in Mathematics, diploma with honors. Lomonosov Moscow State University.

Employment

2021-2022	Visiting lecturer HSE University, Moscow, Russia. Department of Computer Science.
2020-2021	Postdoctoral researcher University of Warwick, Coventry, UK. Department of Computer Science. **Supervisor**: Marcin Jurdzinski.
2016-2019	Junior Research Fellow and Lecturer HSE University, Moscow, Russia. Faculty of Computer Science.

Research interests

Algorithms, complexity, information theory, game theory.

Conference papers

[1] Alexander Kozachinskiy. Continuous Positional Payoffs. *Proceedings of the 32nd International Conference on Concurrency Theory (CONCUR 2021)*. Leibniz International Proceedings in Informatics, vol. 203, pp. 10:1-10:17, 2021.

[2] Alexander Kozachinskiy. Polyhedral Value Iteration for Discounted Games and Energy Games. *Proceedings of the Thirty-Second Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2021)*. Society for Industrial and Applied Mathematics, pp. 600-616, 2021.

[3] Alexander Kozachinskiy and Vladimir Podolskii. Multiparty Karchmer-Wigderson Games and Threshold Circuits. *Proceedings of the 35th Computational Complexity Conference (CCC 2020)*. Leibniz International Proceedings in Informatics, vol. 169, pp. 24:1-24:23, 2020.

[4] Alexander Kozachinskiy and Alexander Shen. Two Characterizations of Finite-State Dimension. *Proceedings of the 22nd International Symposium on Fundamentals of Computation Theory (FCT 2019)*. Lecture Notes in Computer Science, vol. 11651, pp. 80-94, 2018.

[5] Alexander Kozachinskiy. From Expanders to Hitting Distributions and Simulation Theorems. *Proceedings of the 43rd International Symposium on Mathematical Foundations of Computer Science (MFCS 2018)*. Leibniz International Proceedings in Informatics, vol. 117, pp. 4:1-4:15, 2018.

[6] Egor Klenin and Alexander Kozachinskiy. One-Sided Error Communication Complexity of Gap Hamming Distance. *Proceedings of the 43rd International Symposium on Mathematical Foundations of Computer Science (MFCS 2018)*. Leibniz International Proceedings in Informatics, vol. 117, pp. 7:1-7:15, 2018.

[7] Alexander Kozachinskiy. Recognizing Read-Once Functions from Depth-Three Formulas. *Proceedings of the 13th International Computer Science Symposium in Russia (CSR 2018)*. Lecture Notes in Computer Science, vol. 10846, pp. 232-243, 2018. Yandex best student paper award.

[8] Alexander Kozachinskiy. On Slepian – Wolf Theorem with Interaction. *Proceedings of the 11th International Computer Science Symposium in Russia (CSR 2016)*. Lecture Notes in Computer Science, vol. 9691, pp. 207-222, 2016. Yandex best student paper award.

[9] Alexander Kozachinskiy. Making Randomness Public in Unbounded-Round Information Complexity. *Proceedings of the 10th International Computer Science Symposium in Russia (CSR 2015)*. Lecture Notes in Computer Science, vol. 9139, pp. 296-309, 2015.

Journal papers

[1] Alexander Kozachinskiy and Alexander Shen. Automatic Kolmogorov Complexity, Normality, and Finite-State Dimension Revisited. *Journal of Computer and System Sciences*, Vol. 118, pp. 75-107, 2021.

[2] Alexander Kozachinskiy. Recognizing Read-Once Functions from Depth-Three Formulas. *Theory of Computing Systems*, 64(1), pp. 3-16, 2020.

[3] Alexander Kozachinskiy. On Slepian – Wolf Theorem with Interaction. *Theory of Computing Systems*, 62(3), pp. 583-599, 2018.

Teaching experience

2021	Discrete Mathematics. HSE University, Faculty of Computer Science.
2018 – 2019	Mathematical logic and computational complexity. HSE University, Faculty of Computer Science.
2016 – 2019	Discrete Mathematics 2. HSE University, Faculty of Computer Science.
2016 – 2019	Information Theory. Yandex School of Data Analysis.
2016	Computability and Complexity. Independent University of Moscow, Math in Moscow Program.

Grants

2016-2018	Russian Fund for Basic Research grant 16-01-00362, co-performer. Project title: computational complexity and descriptive complexity. Project leader: Nikolay Vereshchagin.
2016-2017	Grant of the President of Russian Federation (MK-7312.2016.1), co-performer. Project title: complexity of Boolean functions and interactive computations. Project leader: Vladimir Podolskii.

Academic visits

2021	Simons Institute Theoretical Foundations of Computer Science program (on-line)
2019	LIRMM CNRS Montpellier, France. Two-week visit, invited by Alexander Shen.
2016	St.Petersburg State University Special Semester on Computational and Proof Complexity.