# **CURRICULUM VITAE**

#### Yury Maximov

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### **Education & Training**

Moscow Institute of Physics and Technology	Russia	Mathematics	Ph.D., 2012
Moscow Institute of Physics and Technology	Russia	Appl. Phys. & Math.	M.S., 2009, Summa Cum Laude
Moscow Institute of Physics and Technology	Russia	Appl. Phys. & Math.	B.S., 2007, Summa Cum Laude

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# Research & Professional Experience

2018 – present	Research Scientist, Theoretical Division 1-5: Appl. Math., Los Alamos National Laboratory
2016 - 2020	Assistant Professor, Provost Office, Skolkovo Institute of Science and Technology
2016 - 2018	CNLS Postdoctoral Fellow, Theoretical Division T-4: Stat. Physics, Los Alamos National Laboratory
2015 - 2016	Assistant Professor, Department of Computer Science, The Higher School of Economics
2015 - 2016	Research Scientist, Institute of Information Transmission Problems of the RAS
2013 - 2014	Postdoctoral researcher, INRIA Rhone-Alpes & University of Grenoble-Alpes
2011 - 2013	AI Team Leader, JSC "Co-Trans" (Moscow, Russia)
2010 - 2011	Research Engineer, JSC "Co-Trans" (Moscow, Russia)
2006 - 2007	Research engineer (part-time), JSC "Forecsys" (Moscow, Russia)

# **Selected Publications**

- 1. Power Grid Reliability Estimation via Adaptive Importance Sampling. Joint with A. Lukashevich. IEEE Cont. Sys. Let. (2021), v. 6, p.1010-1015.
- 2. User preference and embedding learning with implicit feedback for recommender systems. Joint with Sidana, S., Trofimov, M., Horodnytskyi, O., Laclau, C. and Amini, M.R. Data Min Knowl Disc 35, 568–592 (Jan 2021).
- 3. Efficient numerical methods to solve sparse linear equations with application to PageRank. Joint with A. Anikin, A. Gasnikov, A. Gornov, D. Kamzolov, and Y. Nesterov. Opt. Met. and Soft. 19:1-29. (Nov 2020)
- 4. Importance sampling the union of rare events with an application to power systems analysis. Joint with A. Owen and M. Chertkov. Elect. J. of Stat. EJOS 13 (1), 231-254. (2019)
- 5. Entropy-penalized semidefinite programming. Joint with M. Krechetov, J. Marecek, and M. Takac. Int. Joint Conf. on Art. Int. IJCAI. (2019)
- 6. Inference and Sampling of  $K_{33}$ -free Ising Models. Joint with V. Likhosherstov and M. Chertkov. Int. Conf. on Mach. Lear. ICML (2019)
- 7. Aggressive sampling for multi-class to binary reduction with applications to text classification. Joint with B. Joshi, M. Amini, I. Partalas, F. Iutzeler. NeurIPS (2017)

# **Selected Teaching Activities**

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2020	Math 584b/581b: Theoret. Found. of Appl. Math.	University of Arizona (9 invited lectures)
2018, 2020	MA06123: Large Scale-Optimization and Appl.	Skolkovo Institute of Science and Techn. (new course)
2015	Discrete and Combinatorial Optimization	The Higher School of Economics (new course)
2015, 2020	MA030417: Statistical Learning Theory	The Higher School of Economics and Skolkovo Institute
		of Science and Technology (new course)

#### **Selected Grands and Awards**

2021	IEEE Senior Member, H-index: 10
2016	Skolkovo Foundation Young Faculty Research Award, 1-RP-1558
2006-2007	Abramov-Frolov fellowship for outstanding undergraduate students (Moscow Inst. Phys. and Tech.)
2001-2003	Prize-winner of Russian National Olympiads in Mathematics and Economics

#### **Synergistic Activities**

- 1. Program committee member for ICML (2019, 2020, 2021), NeurIPS (2018, 2019, 2020, 2021), ICLR (2020, 2021), AAAI (2019, 2021), PSCC (2018, 2020)
- 2. Regular referee for Mach. Learn. Journ., Autom. and Rem. Cont., El. Power Syst. Res., IEEE Trans. CoNes, IEEE Trans. Power Syst., IEEE Trans. Inf. Theory, Elec. J. of Stat., Proc. of the IEEE.
- 3. M.S. and B.S. thesis advisor of more than 10 students who continued their study at the top graduate schools (CMU, Cornell, Cambridge, ETH Zurich, Oxford, Stanford, UC Berkeley, Yale and others) or work in industry
- 4. Mentor/Internship advisor to more than 5 students from MIT, NYU, UC Berkeley (at Los Alamos Nat. Lab.)