

Michael Figurnov (Михаил Фигурнов)

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I am a Staff Research Scientist at DeepMind in London, UK. My research interests include deep learning, Bayesian methods, and machine learning for biology. I have worked on AlphaFold which has been recognized as the solution to the protein folding problem.

Employment history

DeepMind , London, UK	
Staff Research Scientist	2021-present
Senior Research Scientist	2019-2021
Research Scientist	2018-2019
Higher School of Economics , Moscow, Russia	
Research Fellow	2017
Lamoda.ru , Moscow, Russia	
R&D engineer (part-time)	2013-2014
Ozon.ru , Moscow, Russia	
Data Mining Researcher (part-time)	2011-2013

Selected publications

Please see <https://scholar.google.com/citations?user=qd0tOpQAAAAJ> for a full list of publications.

Highly accurate protein structure prediction with AlphaFold	Nature, 2021
John Jumper*, Richard Evans*, Alexander Pritzel*, Tim Green*, Michael Figurnov* , Olaf Ronneberger*, Kathryn Tunyasuvunakool*, Russ Bates*, Augustin Žídek*, Anna Potapenko*, Alex Bridgland*, Clemens Meyer*, Simon A. A. Kohl*, Andrew J. Ballard*, Andrew Cowie*, Bernardino Romera-Paredes*, Stanislav Nikolov*, Rishub Jain*, Jonas Adler, Trevor Back, Stig Petersen, David Reiman, Ellen Clancy, Michal Zielinski, Martin Steinegger, Michalina Pacholska, Tamas Berghammer, Sebastian Bodenstein, David Silver, Oriol Vinyals, Andrew W. Senior, Koray Kavukcuoglu, Pushmeet Kohli, Demis Hassabis*	
Monte Carlo Gradient Estimation in Machine Learning	JMLR, 2020
Shakir Mohamed*, Mihaela Rosca*, Michael Figurnov* , Andriy Mnih*	
Implicit Reparameterization Gradients	NeurIPS, 2018
Michael Figurnov , Shakir Mohamed, Andriy Mnih	(spotlight)
Spatially Adaptive Computation Time for Residual Networks	CVPR, 2017
Michael Figurnov , Maxwell D. Collins, Yukun Zhu, Li Zhang, Jonathan Huang, Dmitry Vetrov, Ruslan Salakhutdinov	
PerforatedCNNs: Acceleration through Elimination of Redundant Convolutions	NeurIPS, 2016
Michael Figurnov , Aijan Ibraimova, Dmitry Vetrov and Pushmeet Kohli	

Education

Bayesian Methods Research Group / Higher School Of Economics, Moscow, Russia

PhD in Computer Science 2013-2019

Topic: [Probabilistic method of adaptive computation in neural networks](#)

Supervised by Dmitry Vetrov

Lomonosov Moscow State University, Moscow, Russia

Specialist (≈Master of Science) in Applied Mathematics and Computer Science 2008-2013

GPA 4.9/5.0, graduated with honours

Internships and research visits

Google Seattle, USA

Software Engineering Intern, hosted by Li Zhang July - Oct 2016

University of Toronto, Canada

Visiting student, hosted by Ruslan Salakhutdinov Sep - Dec 2015

Microsoft Research Cambridge, UK

Visiting student, hosted by Pushmeet Kohli Sep - Oct 2014

Administrative duties

Co-organizer of the Bayesian methods of machine learning weekly seminar (jointly with Dmitry Vetrov, Dmitry Kropotov) 2013-2017

Awards

2nd place (out of 85), Relevance Prediction Challenge, Yandex, 2011 2011

3rd place award, Intel ISEF 2008
(worldwide scientific projects competition for high school students)

Teaching experience

Moscow State University, Skoltech, Yandex's School of Data Analysis 2014-2015

Teaching assistant, Bayesian Methods of Machine Learning and Graphical Models courses

Moscow State University Sep 2014 - May 2015

Lead instructor, Machine Learning practical classes

Languages

English (fluent)

Russian (native)