Valerii Likhosherstov

EDUCATION

University of Cambridge, Department of Engineering

Cambridge, United Kingdom

Email: vl304@cam.ac.uk

PhD program. Supervisor: Dr. A. Weller. Advisor: Dr. J. M. Hernández-Lobato.

2019-present

Skoltech, Higher School of Economics

Moscow, Russia

Joint MSc program "Statistical Learning Theory". Academic Excellence Diploma; GPA: 5.0/5.0.

2017-2019

Yandex School of Data Analysis

Remote, Russia

A Master-level program in Data Analysis; GPA: 4.86/5.0.

2015-2017

Ural Federal University

Yekaterinburg, Russia

BSc program in Computer Science; GPA: 4.95/5.0.

2013-2017

Research Experience & Publications - click on a paper name to link to the full text

Computationally-efficient recurrent and self-attention architectures

University of Cambridge

Research project in collaboration with researchers at Google

2019-present

• K. Choromanski, D. Cheikhi*, J. Davis*, <u>V. Likhosherstov</u>*, et. al. *Stochastic Flows and Geometric Optimization on the Orthogonal Group*. ICML 2020.

Works in submission as first author or major contributor

- <u>V. Likhosherstov</u>*, J. Davis*, K. Choromanski, A. Weller. *CWY Parametrization: a Solution for Parallelized Learning of Orthogonal and Stiefel Matrices*. Arxiv:2004.08675, 2020.
- K. Choromanski*, <u>V. Likhosherstov</u>*, et al. *Masked Language Modeling for Proteins via Linearly Scalable Long-Context Transformers*. Arxiv:2006.03555, 2020.
- o <u>V. Likhosherstov</u>*, X. Song, K. Choromanski, J. Davis, A. Weller. *UFO-BLO: Unbiased First-Order Bilevel Optimization*. Arxiv:2006.03631, 2020.

Additional works in submission as contributor

- o J. Davis, K. Choromanski, J. Varley, H. Lee, J. Slotine, <u>V. Likhosherstov</u>, et al. *Time Dependence in Non-Autonomous Neural ODEs*, Arxiv:2005.01906, 2020.
- K. Choromanski*, J. Davis*, V. Likhosherstov*, et al. An Ode to an ODE, Arxiv:2006.11421, 2020.

Tractable Ising Models

Moscow, Russia

MSc Thesis. Supervisor: Prof Michael Chertkov (University of Arizona, Skoltech)

2017-2019

 \circ V. Likhosherstov, Y. Maximov, M. Chertkov. Inference and Sampling of K_{33} -free Ising Models. ICML 2019.

Samsung AI Center

Moscow, Russia

Research Internship. supervisor: Prof Victor Lempitsky (Skoltech)

Summer 2018

The goal was to translate 3D human pose data into a high-resolution image of a person using deep learning. Successfully completed.

Book Reading Behaviour

Yekaterinburg, Russia

 $Course\ project$

2015-2016

The aim was to analyse e-book reading behaviour based on logs from the Bookmate application. Publications:

- o P. Braslavski, V. Petras, <u>V. Likhosherstov</u>, M. Gade. *Ten Months of Digital Reading: An Exploratory Log Study*. TPDL'2016.
- P. Braslavski, V. Petras, <u>V. Likhosherstov</u>, M. Gade. *Large-Scale Log Analysis of Digital Reading*. ASIST'2016.

Work Experience

Google UK Ltd

London, United Kingdom

Software Engineering Internship

Adding new features for a Sibyl classifier for large-scale internal machine learning task. Successfully completed.

Google Summer of Code

Remote

Participation Summer 2016

A contribution to the Statsmodels package for statistics and econometrics. Successfully completed.