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

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

- K. Choromanski*, <u>V. Likhosherstov*</u>, et al. *Rethinking Attention with Performers*. ICLR 2021 (**Oral**). Google AI Blog.
- <u>V. Likhosherstov*</u>, K. Choromanski, J. Davis, X. Song, A. Weller. *Sub-Linear Memory: How to Make Performers SLiM.*. NeurIPS 2021.
- <u>V. Likhosherstov</u>*, X. Song*, K. Choromanski, J. Davis, A. Weller. *Debiasing a First-order Heuristic for Approximate Bi-level Optimization*. ICML 2021.
- <u>V. Likhosherstov</u>*, J. Davis*, K. Choromanski, A. Weller. *CWY Parametrization: a Solution for Parallelized Learning of Orthogonal and Stiefel Matrices*. AISTATS 2021.
- <u>V. Likhosherstov</u>, Y. Maximov, M. Chertkov. *Inference and Sampling of K*₃₃-free Ising Models. ICML 2019.
- <u>V. Likhosherstov</u>, Y. Maximov, M. Chertkov. *Tractable Minor-free Generalization of Planar Zero-field Ising Models*. JSTAT ML 2020.
- K. Choromanski*, J. Davis*, V. Likhosherstov*, et al. An Ode to an ODE, NeurIPS, 2020.
- K. Choromanski, D. Cheikhi*, J. Davis*, <u>V. Likhosherstov</u>*, et. al. *Stochastic Flows and Geometric Optimization on the Orthogonal Group*. ICML 2020.
- K. Choromanski*, H. Chen*, H. Lin*, Y. Ma*, A. Sehanobish*, D. Jain, M. S Ryoo, J. Varley, A. Zeng, V. Likhosherstov, D. Kalashnikov, V. Sindhwani, A. Weller. Hybrid Random Features. ICLR 2022.
- V. Likhosherstov*, A. Arnab*, K. Choromanski, M. Lucic, Y. Tay, A. Weller, M. Dehghani. PolyViT: Co-training Vision Transformers on Images, Videos and Audio. Arxiv:2111.12993, 2021.
- V. Likhosherstov*, K. Choromanski*, A. Weller. On the Expressive Power of Self-Attention Matrices. Arxiv:2106.03764, 2021.

WORK EXPERIENCE

Google Brain

Cambridge, United Kingdom

Student Research Program (part-time position)

2021-2022

Conducting research in the are of scalable and multimodal Transformers. Hosts: Mario Lucic, Krzysztof Choromanski.

Samsung AI Center

Moscow, Russia

Research Internship. supervisor: Prof Victor Lempitsky (Skoltech)

Translating 3D human pose data into a high-resolution image of a person using deep learning.

Google UK Ltd London, United Kingdom

Software Engineering Internship
Adding new features for a Sibyl classifier for large-scale internal machine learning task.

Adding new leatures for a Sibyl classifier for large-scale internal machine learning task.

Google Summer of Code Remote

Summer 2017

2016-2017

Participation Summer 2016

A contribution to the Statsmodels package for statistics and econometrics.

SKB Kontur Yekaterinburg, Russia

Software Engineer (part-time position)

Implementation of the named entity recognition system for Russian language.

AWARDS AND SCHOLARSHIPS

Funding Award, Department of Engineering

University of Cambridge 2019-present

An annual contribution towards PhD stipend and tuition fees.

Cambridge Trust Scholarship

University of Cambridge 2019-present

An annual contribution towards PhD stipend and tuition fees.

Travel Award

Long Beach, CA 2019

Student travel award to attend 36th International Conference on Machine Learning.