Aleksei K. Sholokhov

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CONTACT INFORMATION	University of Washington 202 Lewis Hall Seattle, 98105 USA	Personal Site GitHub LinkedIn

RESEARCH INTERESTS

Focused on optimization techniques for mixed-effect models in population health.
Broadly: numerical optimization, machine learning, statistics.

EDUCATION

University of Washington, Seattle, USA   Graduation in June 2023

Ph.D. Student in the Department of Applied Mathematics;
- Research Advisor: Aleksander Aravkin

Moscow Institute of Physics and Technology, Moscow, Russia   July 2018

B.Sc. in Applied Mathematics and Physics,
Department of Control and Applied Mathematics
- Thesis Title: *Multi-armed Bandits in Demand-Response Problems*
- Research Advisor: Yury Maximov

ITMO University, Saint-Petersburg, Russia   August 2015

B. Sc. in Computer Science, *incomplete, program transfer*

PREPRINTS

1. Belyy, A., **Sholokhov. A.,** "MEMOIR: Multi-class Extreme Classification with Inexact Margin." *arXiv preprint arXiv:1811.09863 (2018).*

CONFERENCES

1. Belyy A.V., Selezniova, M.S., **Sholokhov, A.,** and Vorontsov, K., "Quality Evaluation and Improvement for Hierarchical Topic Modelling." *24rd International Conference on Computational Linguistics and Intellectual Technologies*

2. Selezniova, M.S., Belyy A.V., and **Sholokhov, A.**, "Heterogeneous Aggregation of Text Data into Hierarchical Topic Models" 2017. *60th Scientific MIPT Conference.*

3. **Sholokhov, A.**, "Conditional Coordinate Descent Method for Large-Scale Statistical Estimations" 2017. *60th Scientific MIPT Conference.*

POSTER SESSIONS AND TALKS

1. **Sholokhov, A.**, "Conditional Coordinate Descent Method for Large-Scale Statistical Estimations" 2017. *2nd Physics Informed Machine Learning*

TEACHING EXPERIENCE

Teaching Associate in University of Washington	January 2019 – Present
• Calculus with Analytic Geometry II	Winter 2019
• Calculus with Analytic Geometry II	Spring 2019
• Scientific Computing in MATLAB	Fall 2019
• Optimization: Fundamentals and Applications	Winter 2020
• High Performance Scientific Computing	Spting 2020

Teaching Assistant in Remote High School of MIPT	September 2015 – 2016
• Mathematics, General Physics	

RESEARCH EXPERIENCE	**Institute for Health Metrics and Evaluation, UW**	August, 2019 - Present

Graduate Research Assistant in Math Science Team.
Projects:
- CurveFit: tool that forecasts deaths from COVID-19 for the IHME Projections.
- SkMixed: SciKit-Learn compatible tool for selecting features in mixed models.

Grenoble Informatics Laboratory, UGA	March, June, October 2018

Visiting Research Student working on large-scale multi-label classification. Pre-print

Center for Nonlinear Studies, LANL	January, 2018

Visiting Research Student working on reinforcement learning in demand-response problems for power systems control. This work resulted in my bachelor thesis.

AWARDS

Study Awards
- University of Washington's Top Scholar Award, — September 2018
- MIPT Scholarship "For Outstanding Studying Effort" — December 2015

OTHER ACHIEVEMENTS AND AWARDS

Competitions and Contests:
- First prize in Microsoft Imagine Cup 2015 regional final — April, 2015
- First prize in Business Case Solving Contest "Changellenge 2013"

Social and Other Experience
- University Case Club President in ITMO University — May 2014 - April 2015

HARDWARE AND SOFTWARE SKILLS

Computer Programming:
- GitHub: aksholokhov
- Python, MATLAB, C/C++, Java, Scala

OTHER SKILLS

Languages:
- English – Advanced (C1). TOEFL IBT: 106/120.
- Russian – Native