# Mikhail Yurochkin

PhD Candidate, University of Michigan

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## RESEARCH INTERESTS

Bayesian Modeling, Topic Modeling, scalable MCMC, Algorithmic Convex Geometry, Deep Learning

## EDUCATION

Ph.D. in Statistics, University of Michigan, Ann Arbor

Anticipated May 2018

Advisor: XuanLong Nguyen

**Coursework Highlights:** Bayesian Nonparametrics, Bayesian Computation, Optimization Methods, Numerical Methods, Multivariate Analysis, Data Manipulation, Information Retrieval, Statistical Machine Learning, Poisson Processes, Functional Data Analysis

**M.A. in Statistics,** University of Michigan, Ann Arbor

June 2015

**Bachelors Diploma in Applied Mathematics and Physics,** Moscow Institute of Physics

June 2013

and Technology, Russia

## Publications & Presentations

**Yurochkin M.**, Guha A. & Nguyen X. (2017). Conic Scan-and-Cover algorithms for nonparametric topic modeling. *Advances in Neural Information Processing Systems (NIPS)* 31, 2017.

**Yurochkin M.**, Nguyen X. & Vasiloglou N. (2017). Multi-way Interacting Regression via Factorization Machines. *Advances in Neural Information Processing Systems (NIPS)* 31, 2017.

Ho N., Nguyen X., **Yurochkin M.**, Bui H., Huynh V. & Phung D. (2017). Multilevel Clustering via Wasserstein Means. *International Conference on Machine Learning (ICML)* 34, 2017.

**Yurochkin M.** & Nguyen X. (2016). Geometric Dirichlet Means algorithm for topic inference. *Advances in Neural Information Processing Systems (NIPS)* 29, 2016.

**Yurochkin M.** & Nguyen X. (2015). Geometric Topic Modeling. *From Industrial Statistics to Data Science Conference*. Poster Presentation.

## RESEARCH AND WORK EXPERIENCE

Adobe Research Jun 2017 to Aug 2017

Data science research intern. Developed novel approach for deep learning on graph structured data.

This work resulted in a paper submission to ICLR 2018 and a patent application.

# Consulting for Statistics, Computing, and Analytics Research at University of Michigan

Sept 2016 to Present

Individual appointments and walk-in consultations for faculty and graduate students from various research areas.

**LogicBlox, Predictix** May 2016 to Aug 2016

Science team intern. Developed a novel model for retail demand forecasting. This work is published in NIPS 2017.

## Reviewer experience

ICLR 2018, NIPS 2017, ICML 2017, JCGS 2016, NIPS 2016

## **Contributing to the NSF Supported Projects**

Exploiting Data Relationships to Detect Insider Attacks

Jan 2015 to Present

Geometric approaches to hierarchical and nonparametric model-based inference

Jun 2016 to Present

## **Graduate Student Instructor**

Topics in BiostatisticsJan 2015 to April 2016Applied ProbabilitySept 2014 to Dec 2014Introduction to StatisticsJan 2014 to April 2014Introduction to ProbabilitySept 2013 to Dec 2013

## OTHER

 $\textbf{Programming:} \ Python \ (including \ parallel \ programming, Cython, TensorFlow), R$ 

Github: https://github.com/moonfolk

Webpage: <a href="http://www-personal.umich.edu/~moonfolk/">http://www-personal.umich.edu/~moonfolk/</a>

Languages: Russian, English

**Hobbies:** Board game "Magic: The Gathering", logic puzzles, sports (soccer, table tennis, ice skating, alpine skiing)