Jonathan M. Eskreis-Winkler
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SUMMARY

- Pursuing a summer internship applying statistical methods and thinking to address scalability
- Interested in applications of large-scale machine learning, network analysis and graph-based learning methods
- Expert programmer in R, SQL, Matlab, SAS, Python; comfortable in OS X, Windows, Unix & distributed computing
- Extensive experience in statistical approaches to data analysis and computational harmonic analysis of discrete objects

EDUCATION

University of Chicago, Chicago, IL Sept. 2016 – 2019 (expected)

- Ph.D. in Statistics
- Advisor: Dr. Risi Kondor

University of Chicago, Chicago, IL Sept. 2014 – July 2016

- M.S. in Statistics
- Thesis: Graph-based Semi-supervised learning using Multiresolution Matrix Factorization
- Relevant Coursework: computational linear algebra, machine learning, probability theory, generalized linear models

University of Pennsylvania, Philadelphia, PA Sept. 2008 – Dec. 2012

- B.A. in Mathematics, Minors in Philosophy and Logic, Information & Computation

HONORS & AWARDS

- Summer Research Fellow in UPenn's 2012 Computational Neuroscience Summer Program ($4500)
- Research stipend at Rutgers University DIMACS's 2011 REU Summer Program ($4000)

RESEARCH EXPERIENCE

Data Science Intern, ActionIQ, New York, NY June 2017 – Aug 2017

- Developed a novel procedure to forecast key metrics of marketing audiences using limited data by incorporating new information from untapped sources. Used ideas from forecasting, time series comparison, and machine learning and worked with back-end team to enable a large-scale implementation on an enterprise customer data platform
- Modeled the retention rate of a large weight loss subscription service using multiple channels of data for > 20 million customers. Presented results to heads of product and marketing to guide marketing strategies

Graduate Researcher & Consultant, Dept. of Statistics, University of Chicago, Chicago, IL Sept 2014 - Present

- Worked with an interdisciplinary research team to develop novel tools for analysis of large network data
- Served as team leader for groups of Ph.D. and M.S. students to assist investigations of causal inference in sociology, linear modeling for biologists, and developed competitive new metrics for assessing comorbidities of patients
- Applied theoretical background from coursework to real-world consulting problems in diverse settings; presented findings at presentations that catered to clients as well as professors of statistics
- Taught beginner and intermediate statistics to undergraduates, clearly communicating difficult analytical concepts

Statistical Programmer, Biostatistics Division, Weill-Cornell Medical College, New York, NY Mar. 2013-July 2014

- Led data management and data analysis for several retrospective studies on very large biomedical datasets with a focus on evidence-based medicine and policy recommendations
- Gained experience writing readable computer code and collaborating with other biostatisticians
- Participated in several publications that have been submitted to high impact biostatistics and biomedical journals; assisted the chair of biostatistics division with grant writing and grant review

TECHNICAL SKILLS

- Statistics and machine learning techniques: generalized linear models, ridge regression, hypothesis testing, random forests, artificial neural networks, network analysis, time series modeling, ensemble methods, Brownian motion
- Programming languages and environments: R, SQL, Matlab, SAS, Python, LaTeX, html, git, Scala
- Languages: Hebrew (fluent), French, and Yiddish (beginner)
- Woodwork

ACADEMIC PRESENTATIONS/ARTICLES

- **Eskreis-Winkler JM**. Graph-based Semi-supervised learning using Multiresolution Matrix Factorization. Master's thesis presentation. University of Chicago. Chicago, IL. 2016
- Ding Y, Kondor R, **Eskreis-Winkler JM**. Multiresolution Kernel Approximation for Gaussian Process Regression. Conference on Neural Information Processing Systems. Long Beach, CA. 2017