

Nicolás Kim

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*Ph.D. statistician with industry experience in Bayesian modeling and data science.
My research provides theory and algorithms for learning large social networks.
Looking for roles in data science and quantitative finance starting summer 2018.*

Experience

- Summer 2017 **Statistics Research Intern, Eli Lilly and Company**, Indianapolis, IN.
- Developed Bayesian hierarchical model to predict which diseases a new drug will be effective in treating
 - Work is being written up for publication; model code was written in R and several Bayesian samplers
- Summer 2016 **Data Science Research Intern, Nokia Bell Labs**, Murray Hill, NJ.
- Identified spatiotemporal clusters of cellphone users from cell tower connectivity data
 - Work has been published; coding and mapping visualizations done in R and Python
- 2013–Current **Graduate Teaching Assistant, Carnegie Mellon University**, Pittsburgh, PA.
Graduate courses include: Statistical Computing (algorithms); Graphics & Visualization; Hierarchical Models

Education

- 2013–2018 **Ph.D. in Statistics, Carnegie Mellon University**, Expected graduation: May 2018.
Thesis provides tractable algorithms and statistical theory for modeling large social networks
- 2013–2014 **M.S. in Statistics, Carnegie Mellon University**.
Thesis describes the loss in statistical information due to disclosure-avoidance procedures in U.S. Census data
- 2011–2013 **B.A. in Mathematics with Honors, Boston University**.
Marvin I. Freedman Award in Mathematics; graduated in two years

Ph.D. Coursework

- CMU Machine Learning, Deep Learning, Time Series, Graphical Models, Stochastic Processes, Regression
BU Estimation Theory, Hypothesis Testing, Probability Theory I & II (completed as undergraduate)

Papers

- [1] Nicolás Kim and Alessandro Rinaldo. Edge-Induced Sampling from Graphons. Preprint, 2017.
- [2] Nicolás Kim and Alessandro Rinaldo. Community Detection on Ego Networks via Mutual Friend Counts. Preprint, 2017.
- [3] Jin Cao, Sining Chen, Sean Kennedy, Nicolás Kim, and Lisa Zhang. Extracting Mobile User Behavioral Similarity via Cell-Level Location Trace. In *20th IEEE Global Internet Symposium*, 2017.
- [4] Nicolás Kim*, Dane Wilburne*, Sonja Petrović, and Alessandro Rinaldo. On the Geometry and Extremal Properties of the Edge-Degeneracy Model. In *Third Siam International Conference on Data Mining Workshop on Mining Networks and Graphs*, 2016.
- [5] Nicolás Kim. The Effect of Data Swapping on Analyses of American Community Survey Data. *Journal of Privacy and Confidentiality*, 2016.

Programming

R (proficient), Python (proficient), Haskell (intermediate), SQL (some experience)