# BENJAMIN DRAVES

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## EDUCATION

**Boston University - Boston, MA** *Degree expected May 2021*
Ph.D. Candidate in Statistics GPA: 3.96

- Relevant Coursework: Machine Learning, Non/Semi-parametric Data Modeling, Advances in Bayesian Computation, Network Analysis, Probability Theory I/II, Estimation Theory, Hypothesis Testing
- Qualifying Exams: *Applied Stat., Probability* Preliminary Exams: *Mathematical Stat., Applied Stat.*

**Boston University - Boston, MA** *October 2018*
Masters in Statistics GPA: 4.00

- Relevant Coursework: Bayesian Statistics, Computational Statistics, Generalized/Linear Models, Methods for Network Analysis & Graph Algorithms, Stochastic Processes

**Lafayette College - Easton, PA** *May 2017*
B.S. in Mathematics, *Summa Cum Laude* GPA: 3.90

- Honors: Departmental Honors with Thesis, Barge Oratorical Prize (most compelling thesis defense), Mitman Mathematics Award (most outstanding mathematics major), DataFest 2017 Award Recipient

## EXPERIENCE

**Lead Statistical Consultant** 2016 - Present

- BU Consulting: Oversaw a team of 14 masters students working in BU's consulting center. Completed 35 projects for researchers at BU over 10 months. Lead statistical decision making, managed team workflows in weekly lab meetings, and interfaced with clients throughout the project life cycle.
- Freelance Consulting: Clients included *Crayola.com, Ryan Center - PT Treatment Center, University of Mount Union Academic Affairs, Victaulic, Easton Area Public Schools, Easton Area Neighborhood Center.*

**Data Analyst Intern: *National Interstate*** June - August 2017
Adapted and implemented a boosted, generalized regression tree to predict claim frequency and severity. Accounted for 42% weight in final implemented model.

**Graduate Instructor** 2019 - Present
Taught discussion sessions to 30 undergraduate/graduate students in Statistics I and Stochastic Processes. Created weekly lectures, exercises, and group activities to reinforce concepts introduced in the main lecture.

**Leadership Positions** 2017 - Present
BU Student Chapter of the ASA Board Member, BU Network Seminar Organizer, Ignite Student Council

## RESEARCH PROJECTS

**Multiple Network Embeddings** 2018 - Present
Analyzed joint network embedding techniques for heterogeneous networks. We prove concentration results and central limit theorems for node embeddings with a focus on consequent inference. Manuscript submitted Preprint: *here*. Repository: *here*.

**Denoising Sparse Covariance Matrices** 2016 - 2018
Constructed and analyzed iterative smoothing techniques that denoise sparse, positive-definite matrices using spectral methods. Method applied to refining estimates of genetic relatedness. Manuscript in preparation.

## PROGRAMMING CAPABILITIES

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|---|---|
| **Proficient** | R, Java, Github, Unix Enviroment |
| **Intermediate** | Python, SQL, Mathematica, SAS |
| **Typesetting** | LaTex, R Markdown, Microsoft Office |