

# BENJAMIN DRAVES

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(330) 428-5025

## EDUCATION

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### **Boston University - Boston, MA**

Ph.D. Candidate in Statistics

*Degree expected May 2021*

GPA: 4.0

- 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**

Masters in Statistics

*October 2018*

GPA: 4.0

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

### **Lafayette College - Easton, PA**

B.S. in Mathematics, *Summa Cum Laude*

*May 2017*

GPA: 3.9

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

## EXPERIENCE

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### **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 5 discussion sessions of 30 undergraduate students in an introductory statistics course. 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

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### **Multiple Network Embeddings**

2018 - Present

Analyzed joint network embedding techniques for heterogeneous networks. We prove concentration and central limit theorems for node embeddings with a focus on consequent inference. Manuscript in preparation.

### **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 submitted.

## PROGRAMMING CAPABILITIES

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### **Proficient**

R, Java, Github, Unix Environment

### **Intermediate**

Python, SQL, Mathematica, SAS

### **Typesetting**

LaTeX, R Markdown, Microsoft Office