

Hope Johnson | Curriculum Vitæ

490 Kosciuszko Street, Apt 4R – Brooklyn, NY 11221

📞 (206) 909.7183 • ✉ hopecaneel [a t] gmail.com
🌐 <https://hjohns12.github.io/>

Education

Macalester College

St. Paul, MN

B.A., Statistics, Economics

2013–2017

- Cumulative GPA: 3.65
- Statistics Honors Thesis: "A Statistical Analysis of Body-Worn Cameras in Officer-Involved Shootings"
- Economics Capstone: "Natural Disasters and Mobile Banking Adoption in 55 Developing Countries"

Independent and Freelance Research

Accountable Policing Project - Boston

Independent Project

April 2018 – present

- Develop a database documenting instances of police misconduct within the Boston Police Department;
- Working in collaboration with individuals affiliated with Legal Aid Society, Measures for Justice, and the University of Michigan School of Law.

Far-Right Media Manipulation on YouTube

Data & Society

May 2018

- Scrape, clean, and compile data from the YouTube API on far-right YouTube influencer's video statistics;
- Analyze differences between videos related to mainstream media and videos unrelated to mainstream media.

A Statistical Analysis of Body-Worn Cameras in Officer-Involved Shootings

Statistics Honors Thesis

Aug. 2016 – May 2017

- Specify a zero-inflated negative binomial regression to analyze the relationship between body-worn cameras and victim race in officer-involved shootings.

Racial Difference in the Predictive Accuracy of a Recidivism Risk Assessment Instrument

Survival Analysis Term Paper

Fall 2016

- Test if the COMPAS recidivism risk assessment tool predicts the risk of recidivism with equal accuracy across races using a Cox proportional hazards model;
- Awarded first place in the American Statistical Association's undergraduate research paper competition (USRESP).

Heroin and Naloxone: Disentangling an Epidemic

Econometrics Term Paper

Spring 2016

- Investigate the impact of making naloxone available to heroin users;
- Awarded third place in the Minnesota Economic Association's undergraduate research paper competition.

Experience

Mathematica Policy Research

Cambridge, MA

Statistical Analyst

Sept. 2017–present

- Develop and implement social network analyses to evaluate health- and criminal justice-related federal and state government programs;
- Perform Bayesian statistical analysis to assess the impact of Medicaid/Medicare intervention programs;
- Simulate correlated patient-level data for regression testing.

Bill & Melinda Gates Foundation

Seattle, WA

Data Visualization Consultant

Dec. 2016–June 2017

- Quantify and visualize gaps between health services and patient care among Kenyan households;
- Prepare visuals, analysis, and discussion for articles in the Journal of Infectious Disease.

Educating Sustainability Ambassadors Initiative

St. Paul, MN

Data Science Research Analyst

June - Aug. 2016

- Construct a linear mixed-effects model to describe the relationship between farm-to-school programs and student educational outcomes in Minnesota.

Crossroads Resource Center

Minneapolis, MN

Empirical Research Assistant

June - Aug. 2015

- Researched the economics of local food supply chains in St. Paul and Minneapolis.

Information Technology

Advanced Proficiency: R, Python, Julia, Stan, LaTeX, Git, Jira, Stata, Microsoft Office

Intermediate Proficiency: AWS, D3.js, Node.js, JavaScript, HTML, CSS, Processing, Tableau

Basic Proficiency: SQL, SAS, Haskell

Awards, Grants, and Honors

2nd place, Hack for the Sea - Gloucester	2018
1st place, undergraduate research paper contest winner (American Statistical Association)	2017
Recipient of the David Bressoud prize for excellent communication skills in mathematics	2017
Eyeo Festival Student Grant	2017
3rd place, term paper contest winner (Minneapolis Federal Reserve)	2016
Educating Sustainability Ambassador (Howard Hughes Medical Institute/Macalester College)	2016
Omicron Delta Epsilon Economics Honors Society Member	2016

Dean's List (Macalester College) 2013-14

DeWitt Wallace Distinguished Scholar 2013-2017

Presentations and Talks

Friendly Tech Space

Summer Meeting

July 2018

"Centering Equity in Data Science"

Consortium for the Advancement of Undergraduate Statistics Education

Electronic Statistics Research Conference

November 2017

"Survival Analysis of a Criminal Justice Decision Algorithm"

Macalester College

Honors Defense - Department of Applied Mathematics

April 2017

"A Statistical Analysis of Body-Worn Cameras in Officer-Involved Shootings"

Northwestern University

Graduate Research Opportunities for Women in Mathematics (GROW) Conference

Oct. 2016

"Summer Research as an Undergraduate"

Languages

English: Fluent

French: Intermediate

Conversational

Spanish: Basic

Basic words and phrases only

Arabic: Basic

Basic words and phrases only

Bambara: Basic

Basic words and phrases only