

## EDUCATION

**University of California-Berkeley, Berkeley, CA**  
PhD program in Information Management & Systems

August 2020 – present

**Barnard College, Columbia University, New York, NY**  
Major: Environmental Policy, Concentration: Statistics

Bachelor of Arts, May 2018  
Dean's list, Spring 2017- 2018

## SKILLS

**Computer Skills:** R, Python, SQL, GIS, Adobe Creative Suite, Tableau, Javascript, HTML/CSS

**Data Science Skills:** Predictive Modeling, Analyzing Large Data Sets, Regression, Hypothesis Testing, Visualization

## SENIOR THESIS

**“An Exploratory Analysis of Infant Mortality Rate Integration in Social Vulnerability Assessments for Drought Afflicted Mexico”:** The aim of this project is to combine the climate vulnerability index described in the Intergovernmental Panel on Climate Change's 2001 report and Dr. Susan Cutter's Vulnerability of Places model into a holistic framework to understand how drought affects Mexican society. We explore the influence of integrating IMR into a drought vulnerability index. IMR data for the years 2000 and 2014 were obtained from the NASA Socioeconomic Data and Applications Center (SEDAC). A composite vulnerability framework featuring three sub-indices (sensitivity, adaptive capacity and exposure) were developed. For comparison, Principle Component Analysis (PCA) was used to inform the design of an alternative drought vulnerability index. ArcGIS was used to visualize the results of this exploratory analysis.

Thesis Advisor: Blair Goodridge

Thesis Mentors: Sandra Baptista, Dara Mendeloff, Bill Menke

## WORK EXPERIENCE

**AppNexus, a Xandr Company, New York, NY**  
*Data Analyst, Manager*

July 2018 – Sep. 2020

- Project managed and developed a suite of tools for automated reporting for new publisher product releases
- Conducting analyses for internal stake holders on our publisher product
- Dedicated analytical supported for Microsoft and Warner Media
- Creating an interactive visualiaition for the opening of a new floor in Feb. 2020
- Coordinates with Product and Engineering teams in identifying, reporting and resolving product issues
- Authors, edits, publishes an online knowledge base of known publisher related issues
- Pro-bono website development for partnering non-profit organizations

**Empirical Reasoning Center at Barnard College, New York, NY**  
*Empirical Reasoning Fellow*

Sep. 2017 – May 2018

- Provided R and Python expertise in student-led data science help room for over 2,000 students
- Conducted data analysis and computing statistical data for faculty research projects
- Taught GIS workshops for students

**Center for International Earth Science Information Network, Palisades, NY**  
*Project Intern for the Socioeconomic Data and Applications Center*

June 2017 – Aug. 2017

- Manipulated and transformed NASA socioeconomic data to create a composite database of indicator data
- Utilized R to run regression and time series analyses to understand the spatial distribution of health in Mexico
- Winsorized and conducted factor analyses for aggregation method selection
- Constructed a spatial index for testing Mexican livelihood against drought episodes in 2000 and 2014
- Used ArcGIS to create visualizations of health and demographic data for 31 Mexican provinces

**Lamont Doherty Earth Observatory, Palisades, NY**  
*Summer Earth Intern*

June 2016 – Aug. 2016

- Created a geo-coded 100-variable dataset to enable clients to keep inventory of commodities
- Conducted independent statistical research on GPS accuracy to make recommendations for the client
- Designed topographical maps and mobile-ready map projections using GIS software
- Digitized over 15 years of forest fieldwork and created a preliminary database for continuous collection
- Presented research and recommendations in a cohort of 32 students to environmental research scientists

**Columbia Center for Children's Environmental Health, New York, NY**  
*Research Translation and Outreach Intern*

Dec. 2015 – May 2016

- Facilitated free bilingual sustainable household cleaning workshops for over 40 lower-Bronx area families
- Collaborated across community organizations to increase local knowledge of household toxins
- Researched and tested optimization of market-ready mobile apps for neighborhood citizen scientists

## VOLUNTEER AND LEADERSHIP EXPERIENCE

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### **15 Percent Pledge Instagram Campaign** June 2020 - August 2020

Pro Bono Data Scientist

- Completed an analysis of brand representation and diversity for all Whole Food store locations in 2020
- Collaborated with the Pudding Visual Journal to design a Graphic to illustrate the analyses for an 15 Pledge Instagram campaign

### **Jewish Family and Children's Services of Greater Philadelphia, Summer Work Readiness Program** August 2020

Guest Speaker

- Spoke to 15 middle students about a STEM and educational opportunities

### **Beyond Barnard STEM Careers Week Panelist** August 2020

Panelist

- Spoke to 30 Barnard students about my career trajectory and professional development for students in tech
- Provided one on one coaching for two students following the Panel

### **HEOP/CSTP Barnard Big Sister Dinner** July 2020

Guest Speaker

- Spoke with 22 students who were enrolled in the Barnard higher education opportunity program about professional development within STEM

## CAMPUS INVOLVEMENT & FELLOWSHIPS

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### **United Against Hate Challenge Grant**

July 2020

- \$620 student fellowship intended to support diversity, equity, and inclusion at the UC Berkeley School of Information

### **Eugene Cote-Robles Fellowship**

March 2020

- Diversity award of \$25000 that is renewable for two years during graduate training

### **Datathon at Brown University, Competition Participant**

Feb 2018

### **The Pollination Project Grant, 2017 Recipient**

October 2017

- Received a \$1000 grant to create and publish an anthology of essays featuring first generation college student narratives at Barnard College and Columbia University

### **Athena Summer Fellowship, Fellow**

June 2017 – Aug 2017

- Awarded a \$4000 grant by the Athena Center for Leadership Studies to conduct research for the NASA Socioeconomic Data and Applications Center at Columbia University

### **Mellon Mays Undergraduate Fellowship, Fellow**

April 2016 – May 2018

- Awarded over \$10,000 in grants for conducting and periodically presenting independent research

### **Barnard First Generation Advisory Board, Founding Board Member**

Sep. 2015 – May 2018

- Leading a group of 15 students to implement the Dean of Academic Enrichment's policy improvements for first generation college students at Barnard College

## CONFERENCE PRESENTATIONS

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**"The Geography of Impaired Fecundity: The Effects of Environmental Racism on Reproductive Choice"** *Mellon Mays Undergraduate Fellowship 2016 Regional Conference*, Hunter College, New York, NY, April 2016.

**"GPS precision and customized georeferenced maps on handheld devices: Educational modules at Black Rock Forest"** *Lamont-Doherty Earth Observatory Summer Earth Intern Poster Presentations*, Columbia University, New York, NY, August 2016.

**"An Exploratory Analysis of Infant Mortality Rate Integration in Social Vulnerability Assessments for Drought Afflicted Mexico"** *Barnard Summer Research Institute Poster Session*, Barnard College, New York, NY, July 2017.

**"An Exploratory Analysis of Infant Mortality Rate Integration in Social Vulnerability Assessments for Drought Afflicted Mexico"** *Inaugural Ivy League Undergraduate Research Symposium*, University of Pennsylvania, Philadelphia, PA, November 2017.

**"Tracking Where Drought Hurts the Most: A Socio-Health Based Approach to Social Vulnerability in Mexico"** *Mellon Mays Undergraduate Fellowship 2018 Regional Conference*, Queens College, New York, NY, April 2018.

**"Tracking Where Drought Hurts the Most: A Socio-Health Based Approach to Social Vulnerability in Mexico"** *Environmental Science Senior Thesis Poster Presentation*, Barnard College & Columbia University, New York, NY, May 2018.

## PUBLICATIONS

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**"Tracking Where Drought Hurts the Most: A Socio-Health Based Approach to Social Vulnerability in Mexico"** *Mellon Mays Undergraduate Journal*, February 2019 .