Katherine Jolly

CONTACT INFORMATION	katiejolly6@gmail.com (703)-881-1282	https://github.com/katiejolly http://katiejolly.io

EDUCATION	**Macalester College, St. Paul, MN**	Spring 2019 (expected)

Double major Applied Mathematics/Statistics and Geography   GPA 3.64

Selected courses: linear algebra; statistical modeling; statistical research methods in geography; statistical computing and machine learning; metro analysis; GIS; health GIS; probability; discrete mathematics; core concepts in computer science; survival analysis; real analysis; 2D design

TECHNICAL SKILLS Software and Programming Languages: R, ArcGIS, QGIS, GitHub, Excel, Python, SQL, HTML5/CSS, LaTeX, Tableau, Django, Jekyll, R Shiny, Adobe Illustrator/InDesign

Methods: data visualization, regression, data cleaning, text analysis, web scraping, random forests, clustering, geographic network analysis, spatial autocorrelation, map digitization

CAMPUS LEADERSHIP

Math, Statistics, and Computer Science Department
Student Representative   Sept. 2018 - present
Women in Math, Statistics, and Computer Science Committee
Committee Member   Dec. 2017 - present

PROFESSIONAL EXPERIENCE

Voting Rights Data Institute, MIT/Tufts/Harvard, Cambridge, MA
Undergraduate Summer Fellow   June - August 2018
- Worked on weekly projects related to math and gerrymandering
- Organized a team to build an open source shapefile of 2016 voting precincts in Ohio using digitization of PDF maps and computational methods to approximate boundaries in counties without maps
- Presented updates weekly in an informal session with other fellows and mentors
- Pair-programmed an interactive Shiny app showing the output from the MCMC algorithm that creates millions of potential districting plans by mapping district flips of individual precincts

Macalester College Math, Statistics, and Computer Science Department
Teaching Assistant, Introduction to Data Science (COMP 112)   Aug. 2017 - current
- Attend every class to assist with in-class activities and lectures
- Hold four office hours per week to answer homework and general questions
- Serve as a mentor for students in the first year seminar section
- Grade in-class activities promptly

BlueLabs, Washington, DC
Data Science Intern   June - Aug. 2017
- Worked on the data science team doing projects related to political analytics
- Created maps for use in professional presentations
- Wrote python scripts to scrape web data

Planned Parenthood, St. Paul, MN

Statistical Consultant   Jan. 2017 - May 2017

- Built logistic models to predict no-shows
- Applied network analysis and spatial autocorrelation to determine the optimal clinic to open for late hours
- Communicated findings to Planned Parenthood staff in formal presentation to inform changes in scheduling procedures

AWARDS   2018 Best Video Presentation at eUSR Conference 2018 MN GIS/LIS Student Scholar (first place in presentation competition) 2017-2018 Student Educator of the Year Award (Macalester)

PRESENTATIONS   **Digitizing, Districting, and Data: Creating an Open-Source Precinct Shapefile for Ohio**
Electronic Undergraduate Statistics Research Conference, Nov. 2018
Digitizing, Districting, and Data: Creating an Open-Source Precinct Shapefile for Ohio
MN GIS/LIS Conference, October 4, 2018
Political donations from STEM community: Learning dplyr!
RLadies- Twin Cities, December 9, 2017
Writing narratives with data: An introduction to ggplot2!
RLadies- Twin Cities, November 18, 2017
Proud leaders: How women in tech talk about themselves on Twitter
Electronic Undergraduate Statistics Conference, November 3, 2017
Proud leaders: How women in tech talk about themselves on Twitter
Hack and Tell DC, August 15, 2017