# Kathleen Hablutzel

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## **EDUCATION**

SMITH COLLEGE NORTHAMPTON, MA

Majors in Computer Science & Statistical and Data Sciences

Expected May 2023

- 4.0/4.0 GPA
- Zollman Scholarship: Smith's highest academic scholarship, awarded to fewer than 10 entering first-year students
- STRIDE Research Program: Selective paid research assistant position in Smith's software engineering lab
- Relevant Coursework: Algorithms, Machine Learning, Research Design and Analysis, Data Structures, Introduction to Data Science, Communicating with Data, Theory of Computation, Multiple Regression, Linear Algebra
- Technical Skills: Python, SQL, Java, JavaScript, R, Git/GitHub, HTML/CSS, Tableau

## **EXPERIENCE**

#### STRIDE RESEARCH PROGRAM

NORTHAMPTON, MA

Software Engineering Research Assistant, Smith College

Sept. 2019 - Present

- 2020-2021 Software Engineering: Refactor model management features in web-based requirements engineering goal modeling tool, BloomingLeaf, using Java, JavaScript, JQuery, JSON, and HTML/CSS
- 2019-2020 Data Science Policy: Examined technical and political implications of data-driven surveillance algorithms

BLUEBONNET DATA CHARLOTTE, NC

Data Fellow, Cynthia Wallace for Congress

June - Nov. 2020

- Performed tactical field analytics for Cynthia Wallace's campaign in the NC-09 Congressional District
- Identified over 2000 potential donors from publicly available data sources using the Python BeautifulSoup4 library
- Visualized demographic trends in the district using the ggplot2, sf, and leaflet packages in R

# SUMMER RESEARCH & INNOVATION PROGRAM

DURHAM, NC

Program Assistant, North Carolina School of Science and Mathematics

June - Aug. 2018, 2019, 2020

- Developed repeatable curriculum for an **R Data Science** Bootcamp, including data visualization and data wrangling
- Led redesign of the website architecture of the Research & Innovation Google Site
- Built **Python** script to format 153 student projects into HTML5 website backbone for student research showcase
- As program participant in 2018, implemented optimization algorithms in **MATLAB** and built edge detection programs in **Python** with OpenCV through an internship at the Duke University Zavlanos robotics laboratory

## **LEADERSHIP & ACTIVITIES**

- Algorithms TA: Tutor students in theory and implementation of common algorithms and algorithmic design techniques
- Student Academic Advisor: Advise 53 peers on academic success in Computer Science and Data Science
- Smithies in Statistical and Data Sciences Treasurer: Manage funds and organize department student/faculty lunches
- The Amplifier Project Web Developer: Built the virtual stage for Smith College Theater's Fall 2020 production
- TEDx Committee Chairperson: Coordinated 100-person TEDxNCSSM conference with 5 speakers
- Publication Editor-in-Chief: Managed publication of 2 student research journals from concept to final production

## **AWARDS & INTERESTS**

**Awards:** Arthur Ellis Hamm Prize Winner, Smith College Dean's List, MathWorks Math Modeling Challenge Technical Computing Scholarship Award, High School Mathematical Contest in Modeling Outstanding Winner and National Council of Teachers of Mathematics Winner

Interests: 16th Century British Politics, Cryptography, Theater