Ashley E. Mullan

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EDUCATION

Wake Forest University   Winston-Salem, NC
M.S. in Statistics, GPA: 4.00/4.00   Expected May 2024
Graduate Certificate in Data Science, GPA: 4.00/4.00
Thesis Advisor: Sarah Lotspeich, Ph.D.

- − Thesis in progress: Adjusting for misclassification to quantify the relationship between diabetes and local access to healthy food

University of Scranton   Scranton, PA
B.S. in Applied Mathematics and Philosophy, *Summa Cum Laude*, GPA: 3.94/4.00   May 2022
Minors in Computer Science and Finance, Concentration in Data Science
Honors Program, Special Jesuit Liberal Arts Honors Program
Thesis Advisor: Murong Xu, Ph.D.

- − Thesis: Music Feature Classification: Using Techniques of Machine Learning to Detect Genre
- − Available from https://digitalservices.scranton.edu/digital/collection/p15111coll1/id/1340/rec/68

St. Anthony's High School   South Huntington, NY
Advanced Regents Diploma   June 2018

RESEARCH AND WORK EXPERIENCE

8. **Lead Teaching Assistant**   Winston-Salem, NC
   Wake Forest University, Departments of Statistical Sciences and Mathematics   Mar 2023 – Present
   Mentor: Lynne Yengulalp, Ph.D.

   - Managed scheduling and logistics for over 70 teaching assistants and tutors
   - Developed resources for pedagogical training and curriculum support

7. **Research Assistant**   Winston-Salem, NC
   Wake Forest University, Department of Statistical Sciences   Jan 2023 – Present
   Mentors: Sarah Lotspeich, Ph.D. and Tanya Garcia, Ph.D.

   - Developed methods for error-prone data
   - Contributed to ongoing lab projects and manuscripts

6. **Data Science Intern**   Winston-Salem, NC
   Hanesbrands   June 2023 – August 2023

   - Designed and implemented a scalable predictive sales model prototype
   - Identified a multi-million dollar sales growth opportunity for a major account

5. **Academic Tutor**   Huntington, NY
   Self-Employed   January 2012 – Present

   - Supported students with mathematics and statistics coursework
   - Prepared students for standardized exams

4. **Summer Research Intern** — Virtual
Central Washington University, Department of Mathematics — June 2021 – August 2021
Mentor: Sooie-Hoe Loke, Ph.D.

- Modeled a popular game show using R and Python
- Communicated findings to peers and mentors using Beamer presentations
- Attended workshops, talks, and lectures by field experts

3. **Summer Research Intern** — Virtual
Carnegie Mellon University, Department of Statistics and Data Science — June 2020 – August 2020
Mentors: Sam Ventura, Ph.D. and Ron Yurko, Ph.D.

- Worked on visualization and modeling projects in sports analytics using R
- Attended workshops, talks, and lectures by field experts

2. **Academic Tutor** — Scranton, PA
University of Scranton, Center for Teaching and Learning Excellence — March 2019 – May 2022

- Supported individual students with coursework in math, statistics, computing, logic
- Reinforced classroom instruction for small groups of students on a drop-in basis

1. **Financial Analyst** — East Northport, NY
VentureBrandUSA LLC — July 2019 – July 2021

- Developed spreadsheet templates to model investment values over time

HONORS AND AWARDS

12. **Graduate Student Award for Outstanding Scholarship, Wake Forest University** — 2024
Awarded by the Department of Statistical Sciences for scholarship, ingenuity, and dedication

11. **Travel Award, Women in Statistics and Data Science Conference** — 2023
Merit-based award for student or early professional conference attendees

10. **Gertrude M Cox Scholarship** — 2023
Awarded by the American Statistical Association to an early-career graduate student

9. **Teaching Assistantship, Wake Forest University** — 2022 – 2024
Full tuition grant and teaching stipend

8. **Provost Merit Scholarship, Wake Forest University** — 2022 – 2024
Merit-based graduate student award

7. **Outstanding Poster, Mathematical Association of America MathFest** — 2022
Awarded for excellent project presentation and poster design

6. **Excellence in Applied Mathematics Award, University of Scranton** — 2022
Merit-based department award

5. **Humanities Fellow, University of Scranton Slattery Center** — 2021 – 2022
Undergraduate humanities research grant

4. **Presidential Scholarship, University of Scranton** — 2018 – 2022
Merit-based full-tuition scholarship awarded for exemplary academic achievement

3. **Dean's List, University of Scranton** — 2018 – 2022
Distinction granted to full-time students with a GPA above 3.50

2. **Central Convergence REU Scholar** — 2021
Undergraduate research grant

1. **National Hispanic Scholar, Hispanic Scholarship Fund** — 2018 – 2020
Merit-based distinction and scholarship awarded to university students of Hispanic heritage

Presentations

8. **Invited Talk:** Adjusting for Misclassification to Quantify the Relationship   Scranton, PA
Between Diabetes and Local Access to Healthy Food - *Invited Talk, University of Scranton*   March 2025

7. **Contributed Talk:** Adjusting for Measurement Error to Quantify the Relationship   Baltimore, MD
Between Diabetes and Local Access to Healthy Food - *ENAR Spring Meeting*   March 2024

6. **Contributed Poster:** Rate This Interruption: Using Interrupted Time Series   Bellevue, WA
Techniques to Analyze Popular Television Couples and Episode Ratings   October 2023
Women in Statistics and Data Science Conference

5. **Contributed Poster:** Music Feature Classification: Using Techniques of Machine   Philadelphia, PA
Learning to Detect Genre - *Mathematical Association of America MathFest Conference*   August 2022

4. **Contributed Poster:** Deal or No Deal: Modeling a Game Show with Utility Theory and   Virtual
Machine Learning - *Joint Mathematics Meetings*   April 2022

3. **Contributed Poster:** Deal or No Deal: Modeling a Game Show with Utility Theory and   Virtual
Machine Learning - *SACNAS NDiSTEM Conference*   August 2021

2. **Featured Talk:** Deal or No Deal: Modeling a Game Show with Utility Theory and   Virtual
Machine Learning - *Mount Stuart Mathematics Seminar Series*   August 2021

1. **Featured Talk:** A Puck Above the Rest: The Effects of New Data on 2020 NHL Draft Decisions   Virtual
Carnegie Mellon Sports Analytics Conference   October 2020

Additional Projects

4. **Point Made: Exploring Factors that Contribute to Team Success**   2020
Carnegie Mellon Sports Analytics Camp
Mentors: Ron Yurko, Ph.D. and Nick Citrone, M.S.
Coauthor: Alana Willis

   - Modeled NBA season results with regression techniques

3. **Batter Up! Visualizing the 2019 MLB Season**   2020
Carnegie Mellon Sports Analytics Camp
Mentors: Ron Yurko, Ph.D. and Nick Citrone, M.S.
Coauthor: Zhiwei Xiao

   - Visualized results for top hitters of the 2019 baseball season in R

2. **An Analysis of SAT Results for New York City Students of the Class of 2010**   2019
The University of Scranton, Introduction to Data Science
Mentor: Jason Graham, Ph.D.

   - Compared mean SAT scores across the population of New York City high schools

1. **Biodiversity in Bryozoan Garden Communities of the Antarctic Marine Shelf**   2017
Long Island University, Department of Biology
Mentors: Scott Santagata, Ph.D. and Paul Paino

   - Quantified and compared biodiversity indices across the Scotia and Weddell Seas

Teaching

3. **Wake Forest University** — Winston-Salem, NC
   Teaching Assistant: STA111 - Elementary Probability and Statistics — Aug 2022 – May 2023
   Supervising Professor: Leo Cella, Ph.D.

   - Supported mathematics and statistics undergraduate students in introductory coursework

2. **University of Scranton** — Scranton, PA
   Teaching Assistant: INTD 290 - Leadership and Civic Responsibility — May 2020 – Aug 2020
   Supervising Professors: Teresa Grettano, Ph.D. and Stephen Whittaker, Ph.D.

   - Assisted with curriculum revision, facilitated weekly small group discussion, and oversaw student presentations

1. **University of Scranton** — Scranton, PA
   Sectional Assistant: Performance Music — Aug 2018 – May 2022
   Supervising Instructor: Cheryl Boga

   - Assisted with group strings lesson facilitation and corrected playing technique
   - Instructed small groups of choir members in aspects of selected choral literature

Professional Service and Memberships

Committees
- International Biometric Society (IBS), Eastern North America Region (ENAR)
  * Social Media Committee — 2023-2024

Officer Roles
- President
  * Pi Mu Epsilon, University of Scranton Chapter — 2021-2022
- Secretary
  * Phi Sigma Tau, University of Scranton Chapter — 2021-2022
  * Upsilon Pi Epsilon, University of Scranton Chapter — 2021-2022

Memberships
- American Statistical Association — 2023-
- Caucus for Women in Statistics — 2023-
- International Biometric Society, Eastern North American Region (ENAR) — 2023-
- Alpha Sigma Nu - National Jesuit Honor Society — 2022-
- Pi Mu Epsilon - National Honor Society in Mathematics — 2021-
- Upsilon Pi Epsilon - International Honor Society in Computing — 2021-
- Phi Sigma Tau - International Honor Society in Philosophy — 2021-

Conference Activities
- Invited Session Organizer
  * "Course Correcting for Coarsened Data"
    Women in Statistics and Data Science, Bellevue, WA — Oct 2023
- Session Chair (Frequency)
  * *ENAR Spring Meeting* (1), *Women in Statistics and Data Science* (1)

Leadership

Wake Forest University

Lead Teaching Assistant - Departments of Statistical Sciences and Mathematics   Mar 2023 - May 2024

– Facilitated mentorship opportunities for new graduate students

University of Scranton

College of Arts and Sciences Dean's Ambassador   Dec 2021 – May 2022

– Presented student concerns to administrators

Admissions Ambassador   Oct 2019 – May 2022

– Panelist for College of Arts and Sciences admission events
– Panelist for prospective Special Jesuit Liberal Arts Honors Program student webinar
– Mathematics student ambassador at in-person and virtual information sessions
– Panelist for virtual information sessions for the Performance Music Department

Mathematics Club (President)   Aug 2018 – May 2022

– Planned events for students in the department
– Organized opportunities for new students to connect with peer mentors

HackScranton Club (Vice President)   Aug 2019 – Dec 2021

– Facilitated club meetings and activities
– Maintained log of club service and social media presence

Royal Investment Group   Aug 2018 – May 2021

– Promoted computational literacy among club members
– Created visualizations of changes in portfolio holdings in R

Club Council   Aug 2019 – May 2020

– Updated club members on changes to university policy for student organizations
– Participated in leadership training sessions

Languages

English
Native Language

Spanish
Intermediate Oral and Written Proficiency

Selected Skills

Programming and Technical
R (advanced), SQL (intermediate), Python (intermediate), LaTeX (intermediate), GitHub (intermediate), Java (intermdiate), Julia (novice), Shiny (novice), Power BI (novice), Cluster Computing (novice)

Applications
Microsoft Suite (advanced), Google Suite (advanced), Bloomberg Terminal (novice)

Other
Data Visualization, Statistical Modeling, Creativity