

## EDUCATION

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### Vanderbilt University

Ph.D. in Biostatistics, GPA: 3.88/4.00

Nashville, TN

Expected May 2029

### Wake Forest University

M.S. in Statistics, GPA: 4.00/4.00

Graduate Certificate in Data Science, GPA: 4.00/4.00

Thesis Advisor: Sarah Lotspeich, Ph.D.

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

Winston-Salem, NC

May 2024

### University of Scranton

B.S. in Applied Mathematics and B.A. in Philosophy, *Summa Cum Laude*, GPA: 3.94/4.00

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>

Scranton, PA

May 2022

### St. Anthony's High School

Advanced Regents Diploma

South Huntington, NY

June 2018

## RESEARCH AND WORK EXPERIENCE

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### 10. Research Assistant

*Vanderbilt University Medical Center, Department of Biostatistics*

Mentor: Rameela Raman, Ph.D.

Nashville, TN

July 2024 – Present

### 9. Lead Teaching Assistant

*Wake Forest University, Departments of Statistical Sciences and Mathematics*

Mentor: Lynne Yengulalp, Ph.D.

Winston-Salem, NC

Mar 2023 – May 2024

### 8. Research Assistant

*Wake Forest University, Department of Statistical Sciences*

Mentor: Sarah Lotspeich, Ph.D.

Winston-Salem, NC

Jan 2023 – May 2024

### 7. Data Science Intern

*Hanesbrands*

Winston-Salem, NC

June 2023 – August 2023

### 6. Academic Tutor

*Self-Employed*

Huntington, NY

January 2012 – Present

### 5. Summer Research Intern

*Central Washington University, Department of Mathematics*

Mentor: Sooie-Hoe Loke, Ph.D.

Virtual

June 2021 – August 2021

4. <b>Summer Research Intern</b> <i>Carnegie Mellon University, Department of Statistics and Data Science</i> Mentors: Sam Ventura, Ph.D. and Ron Yurko, Ph.D.	Virtual June 2020 – August 2020
3. <b>Academic Tutor</b> <i>University of Scranton, Center for Teaching and Learning Excellence</i>	Scranton, PA March 2019 – May 2022
2. <b>Financial Analyst</b> <i>VentureBrandUSA LLC</i>	East Northport, NY July 2019 – July 2021
1. <b>Research Intern</b> <i>Long Island University, Department of Biology</i> Mentors: Scott Santagata, Ph.D. and Paul Paino	Brookville, NY March 2017 – August 2017

## HONORS AND AWARDS

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16. <b>SPAIG Award, American Statistical Association</b> Given annually to recognize outstanding collaborations among academe, industry, and government organizations while recognizing key individual contributors	2025
15. <b>Highly Commended Article, Significance Magazine</b> Designation from the annual Statistical Excellence Award for Early-Career Writing Competition	2024
14. <b>Russell G. Hamilton Scholar, Vanderbilt University</b>	2024-2029
13. <b>Provost's Graduate Fellowship, Vanderbilt University</b>	2024-2029
12. <b>Graduate Student Award for Outstanding Scholarship, Wake Forest University</b> Awarded by the Department of Statistical Sciences for scholarship, ingenuity, and dedication	2024
11. <b>Travel Award, Women in Statistics and Data Science Conference</b> Merit-based award for student or early professional conference attendees	2023, 2024
10. <b>Gertrude M Cox Scholarship, American Statistical Association</b> Awarded for dedication to statistical inquiry, passion for mentoring, and extraordinary commitment to scholarly excellence	2023
9. <b>Teaching Assistantship, Wake Forest University</b> Full tuition grant and teaching stipend	2022 – 2024
8. <b>Provost Merit Scholarship, Wake Forest University</b> Merit-based graduate student award	2022 – 2024
7. <b>Outstanding Poster, Mathematical Association of America MathFest</b> Awarded for excellent project presentation and poster design	2022
6. <b>Excellence in Applied Mathematics Award, University of Scranton</b> Merit-based department award	2022
5. <b>Humanities Fellow, University of Scranton Slattery Center</b> Undergraduate humanities research grant	2021 – 2022
4. <b>Presidential Scholarship, University of Scranton</b> Merit-based full-tuition scholarship awarded for exemplary academic achievement	2018 – 2022
3. <b>Dean's List, University of Scranton</b> Distinction granted to full-time students with a GPA above 3.50	2018 – 2022
2. <b>Central Convergence REU Scholar</b> Undergraduate research grant	2021
1. <b>National Hispanic Scholar, Hispanic Scholarship Fund</b> Merit-based distinction and scholarship awarded to university students of Hispanic heritage	2018 – 2020

## PEER-REVIEWED PUBLICATIONS

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1. S.C. Lotspeich, **A.E. Mullan**, L. D'Agostino McGowan, and S.A. Hepler, "Combining straight-line and map-based distances to investigate the connection between proximity to healthy foods and disease," *Statistics in Medicine*, vol. 44, no. 7, pp. e70054, 2025. doi:10.1002/sim.70054.

## SUBMITTED MANUSCRIPTS

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1. **A.E. Mullan**, P.D.A. Nguyen, S.C. Lotspeich, "Linking Potentially Misclassified Healthy Food Access to Diabetes Prevalence," *Statistics and Public Policy* (under review), 2025+. Preprint: <https://arxiv.org/abs/2505.01465>

## PRESENTATIONS

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16. **Guest Lecture:** Statistics in Your Own Backyard  
*Day of Discovery, Vanderbilt University* Nashville, TN  
September 2025
15. **Contributed Poster and Speed Talk:** Linking Potentially Misclassified Healthy Food Access to Diabetes Prevalence - *Joint Statistical Meetings* Nashville, TN  
August 2025
14. **Contributed Poster:** Visualizing Cost Effectiveness Analysis with Second-Generation Acceptability Curves - *ENAR Spring Meeting* New Orleans, LA  
March 2025
13. **Guest Lecture:** Statistical Ideas You Can Never Unsee  
*PSYCH1130, Cornell University* Ithaca, NY  
March 2025
12. **Invited Talk:** Misclassification Challenges in Quantifying the Relationship Between Diabetes and Local Access to Healthy Food  
*Department of Mathematics, University of Scranton* Scranton, PA  
March 2025
11. **Guest Lecture:** From Idea to Conclusion: A Statistical Perspective  
*School for Science and Mathematics at Vanderbilt* Nashville, TN  
February 2025
10. **Contributed Poster:** Adjusting for covariate misclassification to quantify the relationship between diabetes and local access to healthy food  
*Women in Statistics and Data Science Conference* Reston, VA  
October 2024
9. **Invited Talk:** For Better or For Worse: The First Kiss Effect on Television Ratings  
*International Day of Women in Statistics and Data Science* Virtual  
October 2024
8. **Guest Lecture:** Stats can be fun, I swear!  
*PSYCH1130, Cornell University* Virtual  
September 2024
7. **Contributed Talk:** Adjusting for Measurement Error to Quantify the Relationship Between Diabetes and Local Access to Healthy Food - *ENAR Spring Meeting* Baltimore, MD  
March 2024
6. **Contributed Poster:** Rate This Interruption: Using Interrupted Time Series Techniques to Analyze Popular Television Couples and Episode Ratings  
*Women in Statistics and Data Science Conference* Bellevue, WA  
October 2023
5. **Contributed Poster:** Music Feature Classification: Using Techniques of Machine Learning to Detect Genre - *Mathematical Association of America MathFest Conference* Philadelphia, PA  
August 2022
4. **Contributed Poster:** Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning - *Joint Mathematics Meetings* Virtual  
April 2022
3. **Contributed Poster:** Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning - *SACNAS NDiSTEM Conference* Virtual  
August 2021

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| 2. <b>Featured Talk:</b> Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning - <i>Mount Stuart Mathematics Seminar Series</i>  | Virtual<br>August 2021  |
| 1. <b>Featured Talk:</b> A Puck Above the Rest: The Effects of New Data on 2020 NHL Draft Decisions<br><i>Carnegie Mellon Sports Analytics Conference</i> | Virtual<br>October 2020 |

## PANEL DISCUSSIONS

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| 3. <b>Panelist:</b> Graduate Admissions Advice<br><i>Electronic Undergraduate Student Research Conference</i>  | Virtual<br>November 2024   |
| 2. <b>Moderator:</b> Statistical Storytelling: Insights Into Effective Presentation Strategies<br><i>Women in Statistics and Data Science Conference</i>                 | Reston, VA<br>October 2024 |
| 1. <b>Moderator:</b> The Art of the Invite: Crafting Successful Invited Session Proposals<br><i>International Day of Women in Statistics and Data Science Conference</i> | Virtual<br>October 2024    |

## SOFTWARE

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4. **Author:** Stats can be fun, I swear! - Shiny App  
<https://ashley-mullan.shinyapps.io/lecture-app>
3. **Author:** visegen - R Package  
<https://github.com/ashleymullan/visegen>
2. **Contributor:** POSSUM - R Package  
<https://github.com/sarahlotspeich/possum>
1. **Contributor:** ThemePark - R Package  
<https://github.com/MatthewBJane/ThemePark>

## TEACHING

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| 3. <b>Wake Forest University</b><br>Teaching Assistant: STA111 - Elementary Probability and Statistics<br>Supervising Professor: Leo Cella, Ph.D.                                     | Winston-Salem, NC<br>Aug 2022 – May 2023 |
| 2. <b>University of Scranton</b><br>Teaching Assistant: INTD 290 - Leadership and Civic Responsibility<br>Supervising Professors: Teresa Grettano, Ph.D. and Stephen Whittaker, Ph.D. | Scranton, PA<br>May 2020 – Aug 2020      |
| 1. <b>University of Scranton</b><br>Sectional Assistant: Performance Music<br>Supervising Instructor: Cheryl Boga   | Scranton, PA<br>Aug 2018 – May 2022      |

## MENTORSHIP

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### Research Supervision

*High School Students*

— Danny Hoberman

Jun 2025–Present

## PROFESSIONAL SERVICE AND OUTREACH

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### Officer Positions and Committees

- Co-Organizer, JSM Data Art Show 2024–
- Communications Officer/First Year Liaison, Biostatistics Graduate Student Association, Vanderbilt University 2025–
- Founding Member, Mentorship Committee, ENAR 2025–
- Member, Program Committee, Caucus for Women in Statistics 2025–
- Steering Committee/Social Media Co-Chair, Council for Emerging and New Statisticians (CENS), ENAR 2024–
- Chair/Member, Social Media Committee, ENAR 2023–
- Member, Graduate Honor Council, Wake Forest University 2022–2024
- President, Pi Mu Epsilon Honor Society, University of Scranton 2021–2022
- Secretary, Phi Sigma Tau Honor Society, University of Scranton 2021–2022
- Secretary, Upsilon Pi Epsilon Honor Society, University of Scranton 2021–2022
- President, Mathematics Club, University of Scranton 2018–2022
- Vice President, HackScranton University of Scranton 2019–2021

### Volunteer Outreach

- Judge, ASA K-12 Data Visualization Poster Competition 2025
- Judge, Undergraduate Statistics Project Competition 2025
- Mentor, Flash Mentoring, Caucus for Women in Statistics 2024, 2025
- Pen Pal, Letters to a Pre-Scientist 2024–2025
- Activity Lead, Florence Nightingale Day, Wake Forest University 2024
- Proctor, MathCounts, Wake Forest University 2023
- Dean’s Ambassador, College of Arts and Sciences, University of Scranton 2021–2022
- Admission Ambassador, University of Scranton 2019–2022
- Royal Tie Peer Mentor, University of Scranton 2021–2022

### Conference Activities

- Invited Session Organizer (Frequency)
  - \* *ENAR Spring Meeting* (1), *Women in Statistics and Data Science* (2), *International Day of Women in Statistics and Data Science* (2)
- Session Chair (Frequency)
  - \* *Joint Statistical Meetings* (1), *International Day of Women in Statistics and Data Science* (2), *ENAR Spring Meeting* (1), *Women in Statistics and Data Science* (2), *Caucus for Women in Statistics Event* (1)

## SKILLS

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- **Programming:** R (advanced), SQL (intermediate), Python (intermediate), LaTeX (intermediate), GitHub (intermediate), Shiny (intermediate), Java (intermediate), Cluster Computing (novice), Julia (novice), Power BI (novice), HTML (novice)
- **Applications:** Microsoft Suite (advanced), Google Suite (advanced), Bloomberg Terminal (novice)
- **Languages:** English (native), Spanish (intermediate written and oral proficiency)