Ashley E. Mullan

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EDUCATION

Wake Forest University

Winston-Salem, NC

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

May 2024

Graduate Certificate in Data Science, GPA: 4.00/4.00

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

St. Anthony's High School

South Huntington, NY

June 2018

Advanced Regents Diploma

RESEARCH AND WORK EXPERIENCE

Lead Teaching Assistant

Winston-Salem, NC Mar 2023 - Present

Wake Forest University, Departments of Statistical Sciences and Mathematics Mentor: Lynne Yengulalp, Ph.D.

Managed scheduling operations and communication for the Math and Stats Center

- Supported over 70 teaching assistants and tutors
- Developed resources for pedagogical training and curriculum support

Research Assistant Winston-Salem, NC

Wake Forest University

Mentors: Sarah Lotspeich, Ph.D. and Tanya Garcia, Ph.D.

- Developed methods for censored covariate data
- Contributed to ongoing lab projects

Data Science Intern

Winston-Salem, NC

Jan 2023 - Present

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

Academic Tutor Huntington, NY Jan 2012 - Present

Self-Employed

Supported students with mathematics and statistics coursework

- Prepared students for standardized exams

Summer Research Intern

(Virtual) Ellensburg, WA Jun 2021 - Aug 2021

Central Washington University, Department of Mathematics

Mentor: Sooie-Hoe Loke, Ph.D.

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- 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

Summer Research Intern

(Virtual) Pittsburgh, PA

Jun 2020 - Jul 2020

Carnegie Mellon University, Department of Statistics and Data Science

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

Academic Tutor Scranton, PA

University of Scranton, Center for Teaching and Learning Excellence

Mar 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

Financial Analyst

East Northport, NY Jul 2019 - Jul 2021

VentureBrandUSA LLC

- Developed spreadsheet templates to model investment values over time

Honors and Awards

Gertrude M Cox Scholarship Awarded by the American Statistical Association to an early-career graduate student	2023
Wake Forest University Teaching Assistantship Full tuition grant and teaching stipend	2022 - 2024
Wake Forest University Provost Merit Scholarship Merit-based graduate student award	2022 - 2024
Mathematical Association of America MathFest Outstanding Poster Awarded for excellent project presentation and poster design	2022
University of Scranton Excellence in Applied Mathematics Award Merit-based department award	2022
University of Scranton Slattery Center Fellow Undergraduate humanities research grant	2021 - 2022
University of Scranton Presidential Scholarship Merit-based full-tuition scholarship awarded for exemplary academic achievement	2018 - 2022
University of Scranton Dean's List Distinction granted to full-time students with a GPA above 3.50	2018 - 2022
Central Convergence REU Scholar Undergraduate research grant	2021

	Epsilon (Chapter President) into national honor society in mathematics		2021
	gma Tau (Chapter Secretary) into national honor society in philosophy		2021
_	Sigma Nu into national Jesuit honor society		2021
_	n Pi Epsilon (Chapter Secretary) into international honor society for computing and information disciplines		2021
	Beta Sigma into honor society for women in business		2021
	al Hispanic Scholar sed distinction and scholarship awarded to university students of Hispanic heritage	2018 –	2020
Projects			
Affiliatio	Feature Classification: Using Techniques of Machine Learning to Detect n: University of Scranton Honors Program Murong Xu, Ph.D.	Genre	2022
– Uti	dergraduate honors thesis project, defended May 2022 lized a convolutional neural network and a random forest to build and analyze a genre class tem	sification	
Affiliatio	r No Deal: Modeling a Game Show with Utility Theory and Machine Lean: Central Convergence Research Experience for Undergraduates Sooie-Hoe Loke, Ph.D. Coauthors: Austin Biondi, Dylan Jamner, Michael Wise	arning	2021
- Use	ed techniques from machine learning and utility theory to predict and explain behavior of slatestants and the banker	how	
Affiliatio Mentors	A Puck Above the Rest: The Effects of New Data on 2020 NHL Draft Decisions Affiliation: Carnegie Mellon Sports Analytics Camp, Pittsburgh Penguins Mentors: Sam Ventura, Ph.D., Ron Yurko, Ph.D., Nick Citrone, M.S. Coauthor: Lucy Ward — Quantified and projected future performance for 2020 NHL draft prospects		2020
			2020
Affiliatio	Made: Exploring Factors that Contribute to Team Success n: Carnegie Mellon Sports Analytics Camp n: Ron Yurko, Ph.D. and Nick Citrone, M.S. Coauthor: Alana Willis		2020
- Mo	deled NBA season results with regression techniques		
Batter	Up! Visualizing the 2019 MLB Season		2020

Affiliation: 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

An Analysis of SAT Results for New York City Students of the Class of 2010

10 2019

Affiliation: 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

Biodiversity in Bryozoan Garden Communities of the Antarctic Marine Shelf

2017

Affiliation: Long Island University

Mentors: Scott Santagata, Ph.D. and Paul Paino

Quantified and compared biodiversity indices across the Scotia and Weddell Seas

TEACHING

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

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

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

University of Scranton

Scranton, PA

Sectional Assistant: Performance Music Supervising Instructor: Cheryl Boga Aug 2018 - May 2022

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

Professional Service

Conference Activities

- Invited Session Organizer
 - * "Course Correcting for Coarsened Data"

 Women in Statistics and Data Science, Bellevue, WA

Oct 2023

- Session Chair (Frequency)
 - * Women in Statistics and Data Science (1)

LEADERSHIP

University of Scranton

College of Arts and Sciences Dean's Ambassador

Dec 2021 - May 2022

- Represented the mathematics department
- Presented student concerns to college 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

Presentations

Women in Statistics and Data Science

Bellevue, WA

Poster: Estimating Mean Residual Life as a Proxy for Time to Diagnosis of Huntington's Disease October 2023

Mathematical Association of America: MathFest

Philadelphia, PA

Poster: Music Feature Classification: Using Techniques of Machine Learning to Detect Genre Aug 2022

Joint Mathematics Meetings

Virtual

Poster: Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning Apr 2022

SACNAS NDiSTEM Conference

Virtual

Poster: Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning Oct 2021

Mount Stuart Mathematics Seminar Series

Virtual

Deal or No Deal: Modeling a Game Show with Utility Theory and Machine Learning Aug 2021

Carnegie Mellon Sports Analytics Conference

Virtual

A Puck Above the Rest: The Effects of New Data on 2020 NHL Draft Decisions Oct 2020

LANGUAGES

English

Native Language

Spanish

Intermediate Oral and Written Proficiency

SELECTED SKILLS

Programming

R (intermediate), SQL (intermediate), Python (intermediate), LaTeX (intermediate), Java (intermediate) Julia (novice), Shiny (novice)

Applications

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

Other

Data Visualization, Statistical Modeling, Creativity