

AMBER DAY

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EDUCATION

University of Texas at Austin <i>Statistics and Data Sciences, PhD - GPA - 3.97</i>	August 2020 – present <i>Austin, Texas</i>
The College at Brockport <i>Mathematics, MA - GPA - 4.00</i>	August 2018 – August 2020 <i>Brockport, New York</i>
University of Rochester <i>Mathematics Education, MS - GPA - 3.97</i>	May 2016 – August 2017 <i>Rochester, New York</i>
Texas State University <i>Mathematics, BS - GPA - 4.00</i>	January 2014 – May 2016 <i>San Marcos, Texas</i>
Austin Community College <i>Mathematics, AS - GPA - 3.66</i>	January 2011 – December 2013 <i>Austin, Texas</i>

COURSEWORK

- Bayesian statistics
- Theoretical Statistics
- Linear Models
- Mathematical Statistics
- Monte Carlo Methods
- Statistical Modeling
- Missing Data Analysis

POSTER SESSIONS

MAA Seaway Conference Comparing Differences of Consecutive Prime Numbers, April 2019
SUNY Brockport Scholars Day Comparing Differences of Consecutive Prime Numbers, April 2019

RESEARCH INTERESTS

Bayesian Sparse Functional Graphical Models

- Estimating the conditional dependence-independence relationships between functions. Applications in genomics, finance, neuroscience.

Machine Learning

- Deep Learning. Nonparametric Bayesian methods. Applications in neuroscience.

Theoretical Statistics

- Theoretical frequentist Statistics.

RESEARCH EXPERIENCE

Bayesian Sparse Functional Graphical Models with Abhra Sarkar

- Helped develop an algorithm to estimate the edges in functional graphical models.

Genome-Wide Association Study (GWAS) with Arbel Harpak

- Compared single nucleotide polymorphism (SNP) effect sizes on educational attainment between individuals who moved away from place of birth and individuals who stayed. Learned the basics of running jobs on Texas Advanced Computing Center (TACC).

Deep Learning with Sinead Williamson

- Studied Deep Learning basics and PyTorch.

Prime Numbers with Gabriel Prajitura

- Compared differences of consecutive prime numbers.

TECHNICAL SKILLS

Statistical & Data Analysis: R, Python, Excel

Other Software & Tools: LaTeX, Microsoft Word, PowerPoint

AWARDS

UT Austin: Dean's Mentoring Fellowship – \$34,000/year, tuition waiver & benefits – August 2020

The College at Brockport: Graduate Assistantship – \$15,500 – August 2018

University of Rochester: Warner School Scholarship – \$53,000 – May 2016

Texas State University: Emmie Craddock Scholarship – \$1,500 – April 2015

Texas State University: Ross and Sarah Wayment Endowed Scholarship – \$1,500 – April 2015

Austin Community College: Austin Kiwanis Club Scholarship – \$1,000 – August 2011

Austin Community College: Austin Rotary Club Scholarship – \$1,200 – August 2011

EMPLOYMENT HISTORY

Teacher

February 2020 – August 2020

Rochester City School District

Rochester, NY

- Instruct high school students in algebra and geometry

Adjunct Lecturer

August 2019-January 2020

SUNY Brockport

Brockport, NY

- Instruct students in business calculus

Adjunct Professor

August 2018-January 2020

Monroe Community College

Brighton, NY

- Instruct students in developmental mathematics

Graduate Assistant

August 2018-January 2020

SUNY Brockport

Brockport, NY

- Tutor Mathematics for the Living Learning Communities program

Educational Opportunity Program (EOP) Instructor

Summer 2019

Monroe Community College

Brighton, NY

- Teach college survival skills to pre-freshman in summer bridge program

Teacher

April 2017-August-2018

Rochester City School District

Rochester, NY

- Instruct 7th and 8th grade mathematics and science

Camp Counselor

Summer 2015

Texas State University

San Marcos, TX

- Help campers to deepen their understanding of and love for mathematics

Mathematics Tutor

October 2013-December 2015

Austin Community College

Austin, TX

- Tutor mathematics

Grader

August 2014-December 2014

Texas State University

San Marcos, TX

- Grade differential equations assignments

Supplemental Instruction Leader

January 2013-December 2013

Austin Community College

Austin, TX

- Organize and hold group study sessions for pre-algebra

Field Manager

Summer 2013

Grassroots Campaigns

Austin, TX

- Recruit, train, and manage a team of activists

Group Leader

January 2012-June 2012

Extend-A-Care

Austin, TX

- Supervise elementary students in after-school program