

Emily Robinson

PHD STUDENT, STATISTICAL CONSULTANT

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About Me

I am currently pursuing a Ph.D in Statistics at University of Nebraska - Lincoln. As a graduate student, I have experience teaching calculus based introductory statistics and consulting / collaborating with researchers from departments across the university. I am passionate about communicating statistics whether I am teaching and mentoring students or working on a research project with domain experts.

Education

Ph.D in Statistics

UNIVERSITY OF NEBRASKA - LINCOLN

- Cumulative GPA: 4.0

Lincoln, NE

Anticipated Graduation May 2022

M.S in Statistics

UNIVERSITY OF NEBRASKA - LINCOLN

- Cumulative GPA: 4.0

Lincoln, NE

August 2017 - May 2019

B.S in Statistics

WINONA STATE UNIVERSITY

- Cumulative GPA: 4.0

Winona, MN

August 2013 - May 2017

B.T in Secondary Mathematics Education

WINONA STATE UNIVERSITY

- Cumulative GPA: 4.0

Winona, MN

August 2013 - May 2017

Professional Development

Teaching Data Science Short Course

JOINT STATISTICAL MEETINGS

- Worked through several exercises from existing courses and gained first-hand experience using relevant tool-chains and techniques, including R/RStudio, literate programming with R Markdown, and collaboration, version control, and automated feedback with Git/GitHub.

Denver, CO

July 2019

Introduction to Business Data Analysis in Python

HOLLAND COMPUTING CENTER

- Lessons were created using Software Carpentry materials and in the SWC style. The workshop provided hands-on experience covering basic concepts and tools, including program design, version control, data management, and task automation.

Lincoln, NE

January 2020

Certifications

5 - 12 Mathematics Teaching License

STATE OF MINNESOTA - DEPARTMENT OF EDUCATION

- File Folder Number: 500935

Minnesota

Issued May 2017 - Expires June 2023

Technical Skills

Proficient in R/RStudio, SAS, SQL, Latex, and Microsoft; Basics of Python, Tableau, and Github

Research Experience

Statistical Consultant

UNIVERSITY OF NEBRASKA - LINCOLN, STATISTICAL CROSS-DISCIPLINARY COLLABORATION AND CONSULTING LAB (SC3L)

- During my time working as a statistical consultant at the Statistical Cross-disciplinary Collaboration and Consulting Lab (SC3L) at UNL, I worked with more than 30 clients one-on-one to design experiments, conduct power analyses, summarize data, and conduct statistical analyses.

Lincoln, NE

January 2019 - PRESENT

Research Assistant

REKA HOWARD, PH.D

Lincoln, NE

May 2018 - August 2018

- Created a code pipeline for genomic prediction in *Pinus taeda* using Bayesian Generalized Linear Regression. Performed prediction using high dimensional genomics data and environmental information via multiple cross validation methods.

Teaching Experience

Graduate Teaching Assistant (Instructor of Record)

UNIVERSITY OF NEBRASKA - LINCOLN

Lincoln, NE

August 2017 - May 2019

- STAT 380, Statistics and Applications, 3 credit hours, Instructor of Record (Spring 2019)
(Calculus based introductory statistics course. Text used: "Probability and Statistics for Engineers and Scientists," 9th Edition by Walpole et al.)
- STAT 218, Introduction to Statistics, 3 credit hours, Instructor of Record (Spring 2018, Fall 2019), Co-Instructor (Fall 2018)
(Non-calculus based introductory statistics course. Text used: "Introduction to Statistical Investigations," by Tintle et al.)

Tutor

SYLVAN LEARNING CENTER

Sioux Falls, SD

May 2017 - August 2017

- Worked with three K - 8 students through reading, mathematics, and science modules. Worked one on one with high school students on ACT prep.

Mathematics Student Teacher

RUSHFORD-PETERSON SENIOR HIGH SCHOOL

Rushford, MN

January 2017 - May 2017

- Taught three sections of Geometry, a college algebra prep course, and an alternative mathematics course. Developed lesson plans, exams, and supplemental materials for learning. Aligned standards and met the 10 Standards of Effective Practice.

Teaching Field Experience

WINONA JUNIOR AND SENIOR HIGH SCHOOL

Winona, MN

August 2014 - May 2016

- Completed 100 hours of classroom experience in 6 - 12 mathematics and reading classrooms. During this time I assisted in instruction, led small group discussions, graded papers, and provided one on one tutoring time.

Mathematics Tutor

WINONA STATE UNIVERSITY, MATH ACHIEVEMENT CENTER

Winona, MN

January 2014 - May 2016

- Provided homework guidance and studying tools to students enrolled in mathematics and statistics courses ranging from college algebra to calculus III and introductory statistics courses to probability and statistical inference.

Professional Experience

Actuarial Intern

BERKLEY HUMAN SERVICES

Minneapolis, MN

May 2017 - August 2017

- Gathered and managed data on non-profit organizations. Collaborated with the Berkley Cooperate modeling team to identify common attributes between non-profits insured by the company using Tree Based Machine Learning methods.

Credit Risk Intern

JOHN DEERE FINANCIAL

Johnston, IA

May 2016 - August 2016

- Developed a portfolio liquidation model using Multinomial Logistic Regression in SAS. Created an Excel user interface using macros.

Statistics Intern

JOHN DEERE HEADQUARTERS

Moline, IL

May 2015 - August 2015

- Created and coded an R-shiny application for sales forecasting validation using the dplyr and ggplot2 packages in R

Committees

Statistics Graduate Student Association, President

UNIVERSITY OF NEBRASKA - LINCOLN

Lincoln, NE

July 2019 - PRESENT

- Responsibilities include leading orientation activities, planning monthly social events, community service projects, and providing student support.

ASUN Graduate Student Assembly, Representative

UNIVERSITY OF NEBRASKA - LINCOLN

Lincoln, NE

August 2019 - PRESENT

- Responsibilities include attending monthly meetings that exercise the student governance of affairs solely involving graduate students at the university, as well as collaborate with the ASUN Senate, officers, and committees on issues affecting the entirety of the university's student body.

Professional Development Committee, Member

Lincoln, NE

UNIVERSITY OF NEBRASKA - LINCOLN

August 2019 - PRESENT

- Responsibilities include organizing professional development opportunities for graduate students at the university and approving funding to individual department organizations for professional development purposes.

IANR Graduate Student Committee, Member

Lincoln, NE

UNIVERSITY OF NEBRASKA - LINCOLN

August 2018 - May 2019

- Responsibilities include attending monthly meetings and assisting in representing all students within the Institute of Agriculture and Natural Resources.

Math/Stat Club, President

Winona, MN

WINONA STATE UNIVERSITY

January 2014 - December 2016

- Responsibilities included organizing student social and professional development events, including graduate school visits. Submit funding requests to student senate.

Presentations

MinneMUDAC

Minneapolis, MN

MINNEANALYTICS

November 2016

- Monthly analysis leading up to competition held at Optum and hosted by Minne Analytics in the Twin Cities of MN. Team won over **\$2000** in prize money for best serendipitous discovery.

Midwest Undergrad Data Analytics Competition (MUDAC)

Winona, MN

WINONA STATE UNIVERSITY, WINONA, MN

March 2016

- Overnight competition to analyze real data and answer questions of interest provided by Mayo Clinic in Rochester, MN. The team used random forest prediction methods and received 3rd place.

Midwest Undergrad Data Analytics Competition (MUDAC)

Winona, MN

WINONA STATE UNIVERSITY, WINONA, MN

March 2015

- Overnight competition to analyze water quality data from the the twin cities area.

Organizations

ASA - American Statistical Association

Mu Sigma Rho - The National Mathematics Honor Society

Pi Mu Epsilon - The National Statistics Honor Society

Volunteering

Mission Trip

Chinandega, Nicaragua

AMIGOS FOR CHRIST

May 2019

- Spent a week in Chinandega, Nicaragua working along side missionaries and Nicaragua citizens on building water systems for rural communities.

Youth Fellowship Leader

Lincoln, NE

SOUTHWOOD LUTHERAN CHURCH

May 2018 - PRESENT

- Served as an adult leader for summer high school mission trips, currently lead small group studies and assist in large group activities 2 - 3 hours a week.

After School Leader

Winona, MN

KIDS FIRST

January 2016 - December 2017

- After school program in the low income housing area. Guided students in completing homework and helped lead the college bound program.

Jamaica Travel Study

Winona, MN

WINONA STATE UNIVERSITY

March 2016

- Traveled to Pedro Plains Primary School in Treasure Beach, Jamaica for one week with the special education department at the university. Fund-raised and collected items for donation to schools and education affiliated organizations in Jamaica. Hand mixed and poured concrete for a netball court at a primary school. Worked with students on music and literacy.