# **Emily A. Robinson**

Ph.D. Candidate, Statistical Consultant

## Overview

2.5+ years statistical consulting experience working with more than 75 clients.

3+ years teaching experience with introductory statistics and HS geometry.

3 summers applying statistics for different industry functions.

### Education

Degrees	Ph.D. in Statistics	August 2019 – Expected August 2022
	University of Nebraska - Lincoln	Lincoln, NE

3.98 Cumulative GPA

M.S. in Statistics August 2017 – May 2019

University of Nebraska - Lincoln Lincoln, NE

4.0 Cumulative GPA

**B.S. in Statistics & B.S. in Secondary Math Education** August 2013 – May 2017

Winona State University Winona, MN

Honors: Summa Cum Laude, Mu Sigma Rho, Pi Mu Epsilon

4.0 Cumulative GPA

Certifications 5-12 Mathematics Teaching License Issued May 2017 – Expires June 2023

State of Minnesota – Department of Education Minnesota

File Folder Number: 500935

**Teaching Experience** 

UNL Graduate Teaching, Instructor of Record Lincoln, NE

Department of Statistics, University of Nebraska - Lincoln August 2017 - May 2019

Average instructor rating: 3.75/4.

STAT 380: Statistics and Applications (3 credit hours)

Spring 2019

STAT 218: Introduction to Statistics (3 credit hours)

STAT 218: Introduction to Statistics (3 credit hours)

STAT 218: Introduction to Statistics (3 credit hours), Co-Instructor

Fall 2018

RPHS Secondary Mathematics Student Teaching Experience Rushford, MN

Rushford-Peterson High School Spring 2017

HS Geometry (3 Sections) College Algebra Prep (1 Section) Alternative Mathematics (1 Section)

Tutoring Sylvan Learning Center, Sioux Falls, SD Summer 2017

Math Achievement Center, Winona State University January 2014 - May 2016

# **Consulting Experience**

#### Consulting

**Statistical Cross-disciplinary Consulting and Collaboration Lab (SC3L)** Lincoln, NE University of Nebraska - Lincoln

January 2019 – Present

75+ clients, 100+ projects, 6 publications

Work one-on-one with clients to design experiments, conduct power analyses, summarize data, conduct statistical analyses, interpret results, and provide written research reports.

Collaborate on graduate theses and manuscripts for peer reviewed journal publication.

Mentor students on leading meetings, running analysis, and writing reports.

Lead hands-on activities in introductory consulting class once a week.

#### Mentoring

STAT 930: Advanced Statistical Consulting (2 credit hours), SC3L Assistant	Spring 2021
STAT 825: Principles of Statistical Consulting (3 credit hours), SC3L Assistant	Fall 2020
STAT 930: Advanced Statistical Consulting (2 credit hours), SC3L Assistant	Spring 2020
STAT 825: Principles of Statistical Consulting (3 credit hours), SC3L Assistant	Fall 2019

# Research Experience

#### Research

### Ph.D. Thesis at University of Nebraska - Lincoln

Lincoln, NE

Co-Advisers: Susan VanderPlas and Reka Howard

May 2020 - Present

Dissertation Topic: Human perception of exponentially increasing data displayed on a log scale evaluated through experimental graphics tasks. GitHub repository available here.

#### Genomic Prediction Graduate Research Assistant

Lincoln, NE

Advisor: Reka Howard

Summer 2018

## Scholarship

#### **Publications**

- 1. [In Preparation] **Robinson, E. A.**, VanderPlas, S., Howard, R., (2021) Eye Fitting Straight Lines in the Modern Era. Target journal: *Journal of Computational and Graphical Statistics*. Access on GitHub here.
- 2. [In Preparation] Ortez, O. A., McMechan, A. J., Hoegemeyer, T., **Robinson, E. A.**, Howard, R. & Elmore, R. W. (2021) Abnormal ear development in corn: does hybrid, environment, and seeding rate matter? Target journal: *Field Crops Research*.
- 3. [Under Review] Reinders, J. D., Reinders, E. E., French, B. W., **Robinson, E. A.** & Meinke, L. J. (2021) Evidence of western corn rootworm resistance to Cry3Bb1 + Cry34/35Ab1 maize in Nebraska. Submitted to *Journal of Economic Entomology*.
- 4. [Under Review] Ongaratto, S., Baldin, E. L., Hunt, T. E., Montezano, D. G., **Robinson, E. A.**, Heier, K., & Santos, M. C. (2021) Larval movement of Anticarsia gemmatalis (Lepidoptera: Erebidae) on vegetative and reproductive stage non-Bt soybean. Submitted to *Journal of Pest Science*.
- [Under Review] Krueger, A. J., Robinson, E. A., Weissling, T. J., Vélez, A. M., & Anderson, T. D. (2021) Chemical combinations reduce growth and survival of monarch butterflies. Submitted to *Journal of Economic Entomology*.
- Reinders, J. D., Wangila, D. S., Robinson, E. A., French, B. W., & Meinke, L. J. (2021) Characterizing the relationship between western corn rootworm (Coleoptera: Chrysomelidae) larval survival on Cry3Bb1-expressing corn and larval developmental factors. *Journal of Economic Entomology*.doi:10.1093/jee/toab151
- 7. Ongaratto, S., Baldin, E. L., Hunt, T. E., Montezano, D. G., **Robinson, E. A.**, & Santos, M. C. (2021). Effects of intraguild interactions on *Anticarsia gemmatalis* and *Chrysodeixis includens* larval fitness and behavior in soybean. *Pest Management Science*. doi:10.1002/ps.6330

#### Presentations

- 1. [Abstract Accepted] **Robinson, E. A.** (Februrary, 2022) Friday Fun Days: Hands-on experience and peer mentoring in a master's level consulting course. *Conference on Statistical Practice*. New Orleans, LA.
- 2. [Abstract Accepted] **Robinson, E. A.**, VanderPlas, S., & Howard, R., (October, 2021) Pandemic Dilemmas: Human perception of exponentially increasing data displayed on a log scale evaluated through experimental graphics tasks. *Women in Statistics and Data Science*. Virtual.
- 3. **Robinson, E. A.** (September, 2021) Eye Fitting Straight Lines in the Modern Era. *Midwest Women in Science Conference*. Virtual Access slides here.
- 4. **Robinson, E. A.**, VanderPlas, S., & Howard, R., (August, 2021) Pandemic Dilemmas: Human perception of exponentially increasing data displayed on a log scale evaluated through experimental graphics tasks. *Joint Statistical Meetings*. Virtual. Access slides here.
- 5. **Robinson, E. A.**, VanderPlas, S., & Howard, R., (April, 2021) You Draw It with r2d3. *Graphics Group, Iowa State University*. Virtual. Access slides here.
- 6. **Robinson, E. A.**, VanderPlas, S., & Howard, R., (Februrary, 2021) Do logs work during a pandemic? Perception of exponentially increasing data. *Graphics Group, Iowa State University*. Virtual. Access slides here.

## **Industry Experience**

# Berkley Human Services Actuarial Internship

John Deere FinancialJohnston, IACredit Risk InternshipSummer 2016

John Deere HeadquartersMoline, ILStatistics InternshipSummer 2015

## Skills

### Technical Skills

Proficient in: R/RStudio, RShiny, RMarkdown, SAS, Latex, Git/GitHub.

Familiar with: Python, SQL, Databases, Tableau, MPlus, SPSS, JavaScript, D3.js.

#### Honors and Awards

## Scholarships

Chancellor's Fellowship, University of Nebraska - Lincoln	2017
Lorena W. Jacobson Scholarship, Winona State University	2014-2017

# Competitions

MinneMUDAC, team won best serendipitous discovery. (MinneAnalytics)	2016
Midwest Undergrad Data Analytics Competition, team recieved 3rd place. (WSU)	2016
Midwest Undergrad Data Analytics Competition, participation. (WSU)	2015

## **Professional Development**

#### Professional membership

American Statistical Association

March 2015 - Present

Minneapolis, MN

Summer 2017

# Short Courses and Workshops

# Preparing to Teach

ASA Section on Statistics and Data Science Education

Virtual August 2021

## **Evolution of Bayesian Software in SAS**

Applied Statistics in Agriculture and Natural Resources

Virtual May 2021

	Navigating Tough Conversations in Statistical Collaborate Conference on Statistical Practices (CSP)	tion Virtual February 2021
	Introduction to Business Data Analysis in Python Holland Computing Center (HCC)	Lincoln, NE January 2020
	rionand Computing Center (FICC)	January 2020
	Teaching Data Science	Denver, CO
	Joint Statistical Meetings (JSM)	July 2019
	Service and Leadership	
JSM	Session Chair: Time Series Analysis and Visualization	August 2021
CSP	Session Chair: Health Care Applications	February 2021
USPROC	Judge: Undergraduate Statistics Project Competition	July 2021
NCUWM	Table Host: Undergraduate Women in Mathematics Networkin	g Dinner Februrary 2020
UNL	Statistics Graduate Student Association, President	July 2019 – Present
	ASUN Graduate Student Assembly, Statistics Representative	August 2019 - May 2020
	Professional Development Committee	August 2019 - May 2020
	IANR/CASNR Graduate Student Committee, Statistics Represen	ntative August 2018 - May 2019
WSU	Math/Stat Club, President	January 2014 - December 2016
Community	Serve in the Community, Southwood Lutheran Church	January 2020 - Present
Service	Youth Fellowship Leader, Southwood Lutheran Church	May 2018 - Present
	Amigos for Christ, Chinandega, Nicaragua	May 2019
	Kids First, Winona, MN	January 2016 - December 2017
	Jamaica Travel Study, Winona State University	March 2016