Emily A. Robinson

Ph.D. Candidate, Statistical Consultant

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Overview

3+ years of teaching experience with introductory statistics and HS geometry.
2.5+ years of statistical consulting experience working with more than 75 clients.
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	
3.98 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)	Fall 2019
STAT 218: Introduction to Statistics (3 credit hours)	Spring 2018
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

Statistical Cross-disciplinary Consulting and Collaboration Lab (SC3L)   Lincoln, NE
University of Nebraska - Lincoln   January 2019 – Present
75+ clients, 100+ projects, 7 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] Carmona G. I., **Robinson, E. A.**, Rosa, A. T., Proctor C. A. & McMechan A. J. (2021) Cover crop planting and termination dates influence arthropod activity in the following corn. Submitted to *Journal of Economic Entomology*.

4. [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*.

5. [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*.

6. 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. *Journal of Economic Entomology*. 10.1093/jee/toab169

7. 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

8. 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 Submitted] **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.* Hosted virtually by University of Chicago. 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

Industry

Berkley Human Services   Minneapolis, MN
Actuarial Internship   Summer 2017

John Deere Financial   Johnston, IA
Credit Risk Internship   Summer 2016

John Deere Headquarters   Moline, IL
Statistics Internship   Summer 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

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 Collaboration Conference on Statistical Practices (CSP)	Virtual February 2021
	Introduction to Business Data Analysis in Python Holland Computing Center (HCC)	Lincoln, NE January 2020
	Teaching Data Science Joint Statistical Meetings (JSM)	Denver, CO 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 Networking Dinner	Februrary 2020
UNL	Statistics Graduate Student Association, President	July 2019 – June 2021
	ASUN Graduate Student Assembly, Statistics Representative	August 2019 - May 2020
	Professional Development Committee	August 2019 - May 2020
	IANR/CASNR Graduate Student Committee, Statistics Representative	August 2018 - May 2019
WSU	Math/Stat Club, President	January 2014 - December 2016
Community Service	Serve in the Community, Southwood Lutheran Church	January 2020 - Present
	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