

Emily A. Robinson

Ph.D. Candidate, Statistical Consultant

✉ emily.robinson@huskers.unl.edu | 🏠 emilyarobinson.com | in [erobinson95](https://www.linkedin.com/in/erobinson95) | 🌐 [earobinson95](https://github.com/earobinson95)

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 University of Nebraska - Lincoln <i>3.98 Cumulative GPA</i>	August 2019 – Expected August 2022 Lincoln, NE
	M.S. in Statistics University of Nebraska - Lincoln <i>4.0 Cumulative GPA</i>	August 2017 – May 2019 Lincoln, NE
	B.S. in Statistics & B.S. in Secondary Math Education Winona State University Honors: Summa Cum Laude, Mu Sigma Rho, Pi Mu Epsilon <i>3.98 Cumulative GPA</i>	August 2013 – May 2017 Winona, MN
Certifications	5-12 Mathematics Teaching License State of Minnesota – Department of Education File Folder Number: 500935	Issued May 2017 – Expires June 2023 Minnesota

Publications

Graphics	1. [Under Review] Robinson, E. A. , VanderPlas, S., Howard, R., (2022) Eye Fitting Straight Lines in the Modern Era. Submitted to <i>Journal of Computational and Graphical Statistics</i> . Access on GitHub here .
Collaborations	2. [In Preparation] Orteza, O. A., McMechan, A. J., Hoegemeyer, T., Robinson, E. A. , Howard, R. & Elmore, R. W. (2022) Abnormal ear development in corn: does hybrid, environment, and seeding rate matter? Target journal: <i>Field Crops Research</i> . 3. [Under Review] Kirkwood-Watts, D., Bremers, E. K., Robinson, E. A. , Brazeal, K. R., & Couch, B. A.(2022) Revisiting clickers: In-class questions followed by at-home reflections are associated with higher student performance on related exam questions. Submitted to <i>Journal of Microbiology & Biology Education</i> . 4. [Under Review] Reinders, J. D, Reinders, E. E., Robinson, E. A. , Moar, W. J., Price, P. A., Head, G. P., & Meinke, L. J. (2022) Characterizing the sublethal effects of SmartStax® PRO dietary exposure on life history traits of the western corn rootworm, <i>Diabrotica virgifera virgifera</i> LeConte. Submitted to <i>PLOS ONE</i> . 5. [Under Review] Carmona G. I., Robinson, E. A. , Rosa, A. T., Proctor C. A. & McMechan A. J. (2022) Cover crop planting and termination dates influence arthropod activity in the following corn. Submitted to <i>Journal of Economic Entomology</i> .

6. Carmona G. I., **Robinson, E. A.**, Campos J. N., & McMechan A. J. (2022) Impact of the timing and use of an insecticide on arthropods in cover crop-corn systems *Insects*. doi: [10.1002/ps.6752](https://doi.org/10.1002/ps.6752)
7. 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. *Journal of Economic Entomology*. doi: [10.1002/ps.6752](https://doi.org/10.1002/ps.6752)
8. 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*. doi: [10.1093/jee/toab169](https://doi.org/10.1093/jee/toab169)
9. 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](https://doi.org/10.1093/jee/toab151)
10. Ongaratto, S., Baldin, E. L., Hunt, T. E., Montezano, D. G., **Robinson, E. A.**, & Santos, M. C. (2021). Effects of intraguild interactions on *Anticarsia gemmatilis* and *Chrysodeixis includens* larval fitness and behavior in soybean. *Pest Management Science*. doi: [10.1002/ps.6330](https://doi.org/10.1002/ps.6330)

Presentations

Invited Talks

1. [Abstract Accepted] **Robinson, E. A.**, VanderPlas, S., Howard, R., (August, 2022). Eye Fitting Straight Lines in the Modern Era. *Joint Statistical Meetings*. Washington, DC.

Contributed Talks

2. **Robinson, E. A.** (October, 2021). Human Perception of Statistical Charts: An Introduction to Graphical Testing Methods. *UNL Nerd Nite*. Lincoln, NE. [Access slides here](#).
3. **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. [Access slides here](#).
4. **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](#).
5. **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](#).
6. **Robinson, E. A.**, VanderPlas, S., & Howard, R. (April, 2021). You Draw It with r2d3. *Iowa State Graphics Group*. Virtual. [Access slides here](#).
7. **Robinson, E. A.**, VanderPlas, S., & Howard, R. (February, 2021). Do logs work during a pandemic? Perception of exponentially increasing data. *Iowa State Graphics Group*. Virtual. [Access slides here](#).

Poster Presentations

8. **Robinson, E. A.** (April, 2022). Eye Fitting Straight Lines in the Modern Era. *UNL Research Days*. Lincoln, NE.
9. **Robinson, E. A.** (February, 2022). Friday Fun Days: Hands-on experience and peer mentoring in a master's level consulting course. *Conference on Statistical Practice*. Virtual.

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

Advisor: Reka Howard

Lincoln, NE

Summer 2018

Consulting Experience

Consulting

Statistical Cross-disciplinary Consulting and Collaboration Lab (SC3L) Lincoln, NE

University of Nebraska - Lincoln

January 2019 – Present

75+ clients, 100+ projects, 9 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, SC3L Assistant

S2020, S2021, S2022

STAT 825: Principles of Statistical Consulting, SC3L Assistant

F2019, F2020, F2021

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)

S2019

STAT 218: Introduction to Statistics (3 credit hours)

S2018, F2019

Other

R Workshops, *University of Nebraska, Lincoln*, In person synchronous

January 2021

Introduction to R, ggplot2, data management and cleaning, package development, literate programming, and Shiny.

Secondary Mathematics Student Teaching Experience

Rushford, MN

Rushford-Peterson High School

Spring 2017

Classes taught: HS Geometry (3 Sections), College Algebra Prep (1 Section), and Alternative Mathematics (1 Section)

Tutoring

Sylvan Learning Center, Sioux Falls, SD

Summer 2017

Math Achievement Center, Winona State University

January 2014 - May 2016

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

Awards	Joint Statistical Meeting (JSM) Student Paper Award for Section on Graphics	2021
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	Skills for Statistical Writing: Tips & Tricks for Improving Written Communication	Virtual
	Conference on Statistical Practices (CSP)	February 2022
	Preparing to Teach	Virtual
	ASA Section on Statistics and Data Science Education	August 2021
	Evolution of Bayesian Software in SAS	Virtual
	Applied Statistics in Agriculture and Natural Resources	May 2021
	Navigating Tough Conversations in Statistical Collaboration	Virtual
	Conference on Statistical Practices (CSP)	February 2021
	Introduction to Business Data Analysis in Python	Lincoln, NE
	Holland Computing Center (HCC)	January 2020
	Teaching Data Science	Denver, CO
	Joint Statistical Meetings (JSM)	July 2019

Service and Leadership

ISU	Iowa State University Graphics Group Seminar Organizer	January 2022 - May 2022
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	February 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	Southwood Lutheran Church Global Missions, La Cabeita, Honduras	March 2022
	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