

Emily A. Robinson

Ph.D. Student, Statistical Consultant

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| Education | University of Nebraska - Lincoln Ph.D. in Statistics 3.98 Cumulative GPA M.S. in Statistics 4.0 Cumulative GPA | Lincoln, NE August 2019 – Expected August 2022 August 2017 – May 2019 |
| | Winona State University B.S. in Statistics, B.S. in Secondary Math Education Honors: Summa Cum Laude, Mu Sigma Rho, Pi Mu Epsilon 4.0 Cumulative GPA | Winona, MN August 2017 – May 2017 |
| Certifications | 5-12 Mathematics Teaching License State of Minnesota – Department of Education File Folder Number: 500935 | Minnesota Issued May 2017 – Expires June 2023 |
| Publications | <ol style="list-style-type: none">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 <i>Journal of Economic Entomology</i>.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. Submitted to <i>Journal of Economic Entomology</i>.Ongaratto, S., Baldin, E. L., Hunt, T. E., Montezano, D. G., Robinson, E. A., & Santos, M. C. (2021). Effects of intraguild interactions on <i>Anticarsia gemmatilis</i> and <i>Chrysodeixis includens</i> larval fitness and behavior in soybean. <i>Pest Management Science</i>. doi:10.1002/ps.6330 | |
| Research experience | Ph.D. Thesis at University of Nebraska - Lincoln Co-Advisors: Susan VanderPlas and Reka Howard Dissertation Topic: Human perception of exponentially increasing data displayed on a log scale evaluated through experimental graphics tasks. GitHub repository available here. | May 2020 – Present |
| | Statistical Cross-disciplinary Consulting and Collaboration Lab (SC3L) University of Nebraska - Lincoln During my time working as a statistical consultant, I have worked with more than 75 clients one-on-one to design experiments, conduct power analyses, summarize data, and conduct statistical analyses. I have interpreted results and provided written research reports to clients. I have collaborated on graduate theses as well as manuscripts for peer reviewed journal publication. | January 2019 – Present |
| | Graduate Research Assistant Advisor: Reka Howard Created a code pipeline for genomic prediction in <i>Pinus taeda</i> using Bayesian Generalized Linear Regression. Performed prediction using high dimensional genomics data and environmental information via multiple cross-validation methods. | Summer 2018 |

Teaching experience

Graduate Teaching Assistant

Department of Statistics, University of Nebraska - Lincoln

2017 - Present

STAT 930: Advanced Statistical Consulting, 2 credit hours

SC3L Assistant (Spring 2020, Spring 2021)

Oversee student collaborations at the SC3L desk, sit in meetings, support students through analysis, provide constructive feedback on consulting reports.

STAT 825: Principles of Statistical Consulting, 3 credit hours

SC3L Assistant (Fall 2019, Fall 2020)

Assist in leading class once a week, share past projects and experience, lead hands-on activities and discussion, arrange for students to shadow SC3L meetings.

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.

Sylvan Learning Center

Sioux Falls, SD

Tutor

Summer 2017

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

Secondary Mathematics Student Teaching Experience

Rushford, MN

HS Geometry, College Algebra Prep, Alternative Mathematics

Spring 2017

Lead daily class lessons, developed lesson plans, exams, and supplemental materials for learning. Aligned standards and met the 10 Standards of Effective Practice.

Math Achievement Center

Peer Tutor, Winona State University

January 2014 - May 2016

Provided homework guidance and studying strategies to students enrolled in mathematics and statistics courses such as college algebra, introductory statistics, Calculus III, probability, and statistical inference.

Industry experience

Berkley Human Services

Minneapolis, MN

Actuarial Internship

Summer 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.

John Deere Financial

Johnston, IA

Credit Risk Internship

Summer 2016

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

John Deere Headquarters

Moline, IL

Statistics Internship

Summer 2015

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

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| Technical Skills | Proficient in: R/RStudio, Shiny, Markdown, SAS, Latex, Git/GitHub. Familiar with: Python, SQL, Tableau, MPlus, SPSS, JavaScript, D3.js. | |
| Service and leadership | Session Chair, Conference on Statistical Practice (CSP) Served as the Chair for CSP 2021 Session CS07 (Health Care Applications). Responsibilities included contacting session speakers prior to conference, introducing speakers at the beginning of the session, keeping track of time, and facilitating a question and answer discussion after presentations. | February 2021 |
| | Statistics Graduate Student Association, President University of Nebraska - Lincoln Responsibilities include planning and leading orientation activities, assisting in prospective student campus/virtual visits, planning monthly graduate student social events, organizing community service projects, and providing student support. | July 2019 – Present |
| | ASUN Graduate Student Assembly, Statistics Representative University of Nebraska - Lincoln Responsibilities included attending monthly meetings that exercise the student governance of affairs solely involving graduate students at the university, as well as collaborating with the ASUN Senate, officers, and committees on issues affecting the entirety of the university's student body. | August 2019 - May 2020 |
| | Professional Development Committee University of Nebraska - Lincoln Responsibilities included organizing professional development opportunities for graduate students at the university and approving funding to individual department organizations for professional development purposes. | August 2019 - May 2020 |
| | IANR/CASNR Graduate Student Committee, Statistics Representative University of Nebraska - Lincoln Responsibilities included attending monthly meetings and assisting in representing all students within the Institute of Agriculture and Natural Resources. | August 2018 - May 2019 |
| | Math/Stat Club, President Winona State University Responsibilities included organizing student social and professional development events, including graduate school visits, and submitting funding requests to student senate. | January 2014 - December 2016 |
| Professional memberships | American Statistical Association Attend annual Joint Statistical Meetings, participate in professional development short courses, serve as session chair. | March 2015 – Present |
| Honors and Awards | Chancellor's Fellowship (University of Nebraska - Lincoln) Lorena W. Jacobson Scholarship (Winona State University) MinneMUDAC, team won best serendipitous discovery. (MinneAnalytics) Midwest Undergrad Data Analytics Competition, team recieved 3rd place. (WSU) Midwest Undergrad Data Analytics Competition, participation. (WSU) | 2017 2014-2017 2016 2016 2015 |