IDENTIFYING INFORMATION:

NAME: Vanderplas, Susan

ORCID iD: https://orcid.org/0000-0002-3803-0972

POSITION TITLE: Assistant Professor

PRIMARY ORGANIZATION AND LOCATION: University of Nebraska Lincoln, Lincoln, Nebraska, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
Iowa State University, Ames, IA, US	Ph.D.	05/2015	Statistics
Iowa State University, Ames, IA, US	M.S.	12/2011	Statistics
Texas A&M University, College Station, Texas, US	B.S.	05/2009	Psychology and Applied Mathematical Sciences

Appointments and Positions

2020 - present Assistant Professor, University of Nebraska Lincoln, Lincoln, Nebraska, United States

2018 - 2019 Assistant Research Faculty, Iowa State University, Statistics, Ames, IA, US

2015 - 2018 Statistical Analyst, Nebraska Public Power District, Columbus, NE, US

Products

Products Most Closely Related to the Proposed Project

1. VanderPlas S, Ge Y, Unwin A, Hofmann H. Penguins Go Parallel: A Grammar of Graphics Framework for Generalized Parallel Coordinate Plots. Journal of Computational and Graphical Statistics. 2023 April 21; :1-16. Available from: https://www.tandfonline.com/doi/full/10.1080/10618600.2023.2195462 DOI: 10.1080/10618600.2023.2195462
2. What Do You See? Perception, Decisions, and Statistical Graphics. 2023 July. DOI: 10.48321/D1JM1H
3. Robinson E, Howard R, VanderPlas S. Eye Fitting Straight Lines in the Modern Era. Journal of Computational and Graphical Statistics. 2022 November 21; :1-8. Available from: https://www.tandfonline.com/doi/full/10.1080/10618600.2022.2140668 DOI: 10.1080/10618600.2022.2140668
4. VanderPlas S, Röttger C, Cook D, Hofmann H. Statistical significance calculations for scenarios in visual inference. Stat. 2021 February 22; 10(1):-. Available from: https://onlinelibrary.wiley.com/doi/10.1002/sta4.337 DOI: 10.1002/sta4.337
5. Vanderplas S, Cook D, Hofmann H. Testing Statistical Charts: What Makes a Good Graph?. Annual Review of Statistics and Its Application. 2020 March 09; 7(1):61-88. Available from: https://www.annualreviews.org/doi/10.1146/annurev-statistics-031219-041252 DOI: 10.1146/annurev-statistics-031219-041252

Other Significant Products, Whether or Not Related to the Proposed Project

1. Wilhelm A, VanderPlas S. Visual Narratives of the Covid-19 pandemic. Journal of Data Science, Statistics, and Visualisation. 2022 November 28; 2(7):84-113. Available from: https://jdssv.org/index.php/jdssv/article/view/64 DOI: 10.52933/jdssv.v2i7.64
2. Vanderplas S. Designing Graphics Requires Useful Experimental Testing Frameworks and Graphics Derived from Empirical Results. Harvard Data Science Review. 2021 July 30; :-. Available from: https://hdsr.mitpress.mit.edu/pub/m7ur7k3u DOI: 10.1162/99608f92.7d099fd0
3. Hofmann H, Carriquiry A, Vanderplas S. Treatment of inconclusives in the AFTE range of conclusions. Law, Probability and Risk. 2020 December 01; 19(3-4):317-364. Available from: https://academic.oup.com/lpr/article/19/3-4/317/6308611 DOI: 10.1093/lpr/mgab002
4. Sievert C, VanderPlas S, Cai J, Ferris K, Khan F, Hocking T. Extending ggplot2 for Linked and Animated Web Graphics. Journal of Computational and Graphical Statistics. 2018 November 14; 28(2):299-308. Available from: https://www.tandfonline.com/doi/full/10.1080/10618600.2018.1513367 DOI: 10.1080/10618600.2018.1513367
5. VanderPlas S, Hofmann H. Clusters Beat Trend!? Testing Feature Hierarchy in Statistical Graphics. Journal of Computational and Graphical Statistics. 2017 April 24; 26(2):231-242. Available from: https://www.tandfonline.com/doi/full/10.1080/10618600.2016.1209116 DOI: 10.1080/10618600.2016.1209116

Synergistic Activities

1. Designed the undergraduate computing curriculum at University of Nebraska Lincoln to focus on development of data wrangling skills, visualization and exploratory data analysis, and conceptual understanding of the data science iterative process. In support of this process as well as the graduate computing class, developed an online textbook for teaching computing in R and python, for use in flipped/active learning classrooms.
2. Developed workshop on communicating with graphics, to be presented at the Symposium on Data Science and Statistics in June 2024. The workshop includes discussion of graphical decision-making, creating graphics designed for human cognitive limitations, and accessibility considerations beyond colorblindness.
3. Consult on UNL Extension research and communications to Nebraska residents about research findings, including work on silage fermentation as well as crop monitoring, field trial analysis, and economic optimization of crop planning.
4. Engagement with lawyers and judges regarding the interpretation of forensic error-rate studies and the validity of forensic examination procedures through amicus briefs, discussions, webinars, and presentations on research findings. These activities cumulatively have the goal of ensuring that the legal system interprets statistical evidence accurately and that the evidence is communicated to the jury in ways that support accurate juror interpretation and evaluation.
5. Coordinate R workshops for individuals in Eastern Nebraska, with a particular focus on the UNL community. Workshops cover basic R syntax, creating publication-level graphics with ggplot2, data wrangling with dplyr and tidyr, statistical modeling, and dynamic document creation with quarto and Rmarkdown. Attendees are primarily graduate students from across the university community who need R skills to facilitate their graduate research.

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Vanderplas, Susan in SciENcv on 2024-03-29 10:46:33