NSF BIOGRAPHICAL SKETCH

Provide the following information for the Senior personnel.
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IDENTIFYING INFORMATION:

NAME: VanderPlas, Susan

ORCID: 0000-0002-3803-0972

POSITION TITLE: Assistant Professor

ORGANIZATION AND LOCATION: University of Nebraska-Lincoln, Lincoln, NE, US

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	DATE RECEIVED	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

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. 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
2. 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
3. Vanderplas S, Nally M, Klep T, Cadevall C, Hofmann H. Comparison of three similarity scores for bullet LEA matching. Forensic Science International. 2020 March; 308:110167-. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0379073820300293 DOI: 10.1016/j.forsciint.2020.110167
4. VanderPlas S, Ryan G, Hofmann H. Framed! Reproducing and Revisiting 150-Year-Old Charts. Journal of Computational and Graphical Statistics. 2019 April 01; 28(3):620-634. Available from: https://www.tandfonline.com/doi/full/10.1080/10618600.2018.1562937 DOI: 10.1080/10618600.2018.1562937
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

Other Significant Products, Whether or Not 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. 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
3. 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
4. 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
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

Synergistic Activities

1. Development of an OER textbook for teaching statistical computing and data science skills in R and python.
2. Writing amicus curiae briefs evaluating scientific support for forensic evidence evaluation techniques that are currently conducted visually (firearms, toolmark, footwear), including assessment of experimental design, empirically validated error rates, reproducibility, and validation of the underlying scientific principles used to support claims made about forensic evidence during courtroom testimony.
3. American Statistical Association Advisory committee on Forensic Science member (2023-2025)
4. American Statistical Association Section on Statistical Graphics Chair (2023-2024)
5. Associate Editor, Journal of Computational and Graphical Statistics

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 2023-04-28 11:48:33