# Susan Vanderplas

## Curriculum Vitae

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	2009
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### Education

Ph.D., Statistics, Iowa State University

MS, Statistics, Iowa State University

BS, Psychology & Applied Mathematical Sciences, Texas A&M University



# Professional Experience

**Statistical Consultant**, Designed Shiny applications for agricultural data for the Iowa Soybean Association and other groups.



**Statistical Programmer**, *Statistics*, Iowa State University, Created and redesigned web-based applets to teach statistical techniques interactively.

**Research Assistant**, *Statistics*, Iowa State University, Designed and analyzed experiments to understand human perception of statistical graphics. Optimized graphics to clearly communicate statistical results and counteract perceptual biases identified during experiments.



**Research Assistant**, *Iowa Department of Transportation*, Iowa State University, Developed a hierarchical bayesian model to determine the effectiveness of road interventions on traffic accidents and fatalities.



**Research Experience for Undergraduates**, *Bioinformatics & Computational Biology*, Iowa State University, Worked with biologists and bioinformaticians to compare homologous gene expression in humans, pigs, and mice.



**Research Experience for Undergraduates**, *Mathematics*, University of Nebraska, Created a mathematical model describing electrical impulse transmission and decay along neurons with varying states of myelination.



#### **Publications**



#### Peer Reviewed Publications

Towfic, Fadi, **Vanderplas**, **Susan**, Oliver, Casey A, Couture, Oliver, Tuggle, Christopher K, Greenlee, M Heather West, and Honavar, Vasant (2010). "Detection of gene orthology from gene co-expression and protein interaction networks". In: *BMC bioinformatics* 11.Suppl 3, S7. DOI: https://doi.org/10.1186/1471-2105-11-S3-S7.



Hull, Rachel, Bortfeld, Heather, and **Koons**, **Susan** (2009). "Near-infrared spectroscopy and cortical responses to speech production". In: *The open neuroimaging journal* 3, p. 26. DOI: https://doi.org/10.2174/1874440000903010026.

Other Publications



