Suzanne Thornton, PhD

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Summary

Experienced professional statistical researcher transitioning to a profession of practice. Proven leadership skills. Strong statistical theorist and programmer with excellent communication abilities.

Work Experience

National Institute of Standards and Technology PREP Research Scientist *Jan 2024 – Present*
George Washington University, Department of Engineering Washington D.C.

- Methods/models: Bayesian measurement error model, imputation for time series with gaps, text-based generative AI detection (theory)
- Other: Co-authored two (successful) NIST grant proposals

Assistant professor of statistics *Sept 2020 – Dec 2023*
Swarthmore College Swarthmore, PA

- Methods/models taught: mathematical statistics, regression, univariate analyses, data visualization
- Other: Published/implemented ethical reasoning in introductory and advanced stats classes, Published in Philosophy of Science

Special government employee *Aug 2022 – Dec 2023*
US Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations Washington, D.C.

- Methods/models: Government statistics, survey data strategy and implementation
- Other: Interdisciplinary collaboration and engagement with user feedback

Visiting assistant professor of statistics *Aug 2019 – Aug 2020*
Swarthmore College Swarthmore, PA

- Methods/models taught: regression, univariate analyses, data visualization
- Other: Designed and taught successful hybrid statistics courses

Statistical consultant *Sept 2016 – Aug 2019*
Office of Statistical Consulting, Rutgers University New Brunswick, NJ

- Methods/models: Predictive modeling, case-control studies, cross validation, exact inference, goodness-of-fit, bootstrap optimism-corrected AUC
- Other: Co-authored publication in *Neurology* with MD from at Robert Wood Johnson Hospital

Education

Rutgers, The State University of New Jersey *Oct 2019*
Doctor of Philosophy in Statistics and Biostatistics New Brunswick, NJ

Thesis: Advanced computing methods for statistical inference

- Methods/models: Approximate Bayesian computing, confidence distribution inference, algorithmic development, bootstrapping
- Other: Parallel computing, taught SAS course

Publication: Exact inference on the random-effects model for meta-analyses with few studies

- Methods/models: Random effects, meta-analysis, exact (small sample) inference

University of Florida *May 2014*
Bachelor of Science in Mathematics and in Statistics Gainesville, FL

Thesis: Geometric ergodicity of Gibbs sampler for a hierarchical random effects model: Re-explained

- Methods/models: Markov chain Monte Carlo, Gibbs Sampling, Bayesian hierarchical random effects model
- Platform: Windows

Software and platforms

- Mac, Windows, Linux
- R, RStudio, RMarkdown, Stan
- Git, Github, GitLab
- VScode, Microsoft Office
- LaTex
- Python