Jessica Hooker, Ph.D.

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SKILLS

Programs & Languages: R, Python, SQL, IBM SPSS, Excel, Tableau, Mplus.

Libraries: ggplot, stats, psych, caret, nlme, pandas, numpy, matplotlib, scikit-learn, seaborn, plotly.

Statistical Skills: Hypothesis testing, Generalized linear modeling, ANOVA, Longitudinal analysis, Mediation, Moderation, Multivariate analysis, Dimension reduction, Machine learning.

PROFESSIONAL EXPERIENCE

PRIMARY DATA SCIENTIST - POSTDOCTORAL RESEARCHER

Florida State University - Autism Institute, Tallahassee, FL   Jan 2020 - Present

- Conducts data analysis and presents insights to stakeholders across multiple projects.
- Used supervised machine learning models of clinical data to identify valuable attributes and inform development of a streamlined detection process for identifying children with autism.
- Analyzed screening tool data to optimize the item set and improve the accuracy of the algorithm for identifying children at risk.
- Partners with a biostatistician to develop methodology and statistical analysis plans.
- Provides oversight and consultation to the data coordination team and external collaborators.
- Established and oversees data quality assurance of research data.
- Collaborates to establish efficient work-flows and proper data collection for clinical trials.
- Directly engages in all stages of data project pipeline across multiple active projects.
- Analyzed clinical trial data to provide insights into treatment effectiveness and explore potential mechanisms for improved treatment response.
- Serve as data science lead on peer reviewed manuscripts and conference presentations.

GRADUATE RESEARCHER

Florida State University, Tallahassee, FL   Aug 2014 – Dec 2019

- Completed an area of specialization in complex statistical modeling.
- Conducted independent and collaborative research and data analysis projects.
- Used latent variable modeling to examine items on a parent-report measures to inform refinement and optimization for future validation studies.
- Conducted linear modeling to analyze and interpret data from a large-scale intervention trial, demonstrating significant results in favor of the target treatment.
- Worked as a technical working group member to review international clinical guidelines on the treatment of autism as part of the WHO Rehabilitation 2030 initiative.

EDUCATION

Ph.D. in Communication Science and Disorders   Dec 2019
Florida State University, Tallahassee, FL

M.S. in Speech-Language Pathology   Aug 2015
Florida State University, Tallahassee, FL