

# Jessica Hooker, Ph.D.

[jesshookerphd.com](http://jesshookerphd.com) | [LinkedIn](#) | [GitHub](#) | [hooker.jess@gmail.com](mailto:hooker.jess@gmail.com)

## SKILLS

---

- **Programs & Languages:** R, Python, IBM SPSS, Mplus, SQL, Excel, Tableau.
- **Statistical Skills:** Hypothesis testing, Generalized linear modeling, ANOVA, Longitudinal analysis, Mediation, Moderation, Multivariate analysis, Dimension reduction, Machine learning.
- **Data Science Skills:** Data project pipeline (pre-processing, visualization, modeling, interpretation), Scientific writing, Experimental design, Presentation.

## PROFESSIONAL EXPERIENCE

---

### Florida State University - Autism Institute

Primary Data Scientist - Postdoctoral Researcher

Jan 2020 - Present

Tallahassee, FL

- Presents **analytic insights** to stakeholders across multiple study teams.
- Collaborates with biostatistician to develop research methodology and statistical analysis plans.
- Manages and wrangles complex longitudinal and multi-study clinical research data.
- Analyzed the psychometric properties of a screening tool to **optimize** the item set and **improve** accuracy metrics for identifying children at risk for autism or social communication delays.
- Utilized supervised **machine learning** models of clinical data to inform the ongoing development of a streamlined detection process for identifying children with autism before age 3.
- Analyzes intervention trial data to provide insights into treatment effectiveness and explore potential mechanisms for improved treatment response.
- Provides oversight and consultation to the data coordination team across multiple research projects.
- Established and oversees data quality assurance of research data.
- Collaborates to establish efficient work-flows for new research studies to ensure proper data collection.
- Performs all stages of data project pipeline across multiple active projects.
- Writes scholarly manuscripts for top research journals in the field.

### Florida State University - Autism Institute

Doctoral Researcher

Aug 2014 - Dec 2019

Tallahassee, FL

- Completed an area of specialization in complex statistical modeling.
- Examined the psychometric properties of parent-report measures, using latent variable modeling, to inform its refinement and optimization for future validation studies.
- Conducted machine learning to analyze and interpret data from a large-scale intervention trial, demonstrating significant results in favor of the target treatment.

## EDUCATION

---

### Florida State University

Ph.D. in Communication Science and Disorders

Dec 2019

Tallahassee, FL

### Florida State University

M.S. in Speech-Language Pathology

Aug 2015

Tallahassee, FL