Bryan Mantell

Research Data Engineer & Scientific Researcher

Bryangman96@gmail.com

https://www.linkedin.com/in/bryanmantell/

https://github.com/BryanMantell

EXPERIENCE

Stanford University RAPID Project — *Research Data Analyst*

September 2022 - PRESENT

- Lead the creation of data-driven reports on public health survey data, providing key insights for research publications.
- Develop and maintain dynamic dashboards that deliver actionable data visualizations, enabling informed decision-making for stakeholders and team members.
- Build and optimize prototypes in R and Python, focusing on integrating new methodologies to enhance reporting capabilities and streamline analysis workflows.

National Eczema Association — *Research Data Analyst*

August 2022 - PRESENT

- Lead the creation of a research data registry using real-world Eczema data, developing a robust infrastructure to collect, organize, and analyze patient-reported outcomes.
- Lead initiatives to transform qualitative data into structured, measurable outcomes, implementing machine learning techniques to enhance analysis of longitudinal data.
- Design and implement automated ETL pipelines, integrating SQL with R/Python, improving data extraction, transformation, and reporting workflows while ensuring data quality and consistency across systems.
- Collaborate with cross-functional teams to refine research questions, guide development on new features, and enhance personalized in-app experiences through data-driven insights.
- Perform advanced analyses on mobile app behavior and longitudinal surveys, delivering actionable reports to shareholders to support publications and strategic decisions.

University of Oregon Center for Translational Neuroscience — *Scientific Programmer*

June 2021 - August 2023

- Develop and optimize R/Python/MATLAB scripts to process and analyze large datasets, improving the efficiency of fMRI data pipelines and behavioral task analyses like the Stop Signal Task.
- Design and manage CloudResearch projects using MTurk, and create custom Qualtrics surveys with embedded JavaScript to support large-scale participant recruitment and data collection.
- Serve as an expert for navigating government regulations for data uploads to the NIMH Data Archive.

LANGUAGES

R, Python, SQL, JSON, Javascript, Markdown, Bash/Shell scripting, HTML/CSS.

SKILLS

Tableau, MixPanel, SPSS, MATLAB, OpenAI API, Qualtrics API, multiple data structures (fMRI, EEG, HRV, RSA, longitudinal, unstructured), advanced statistical modeling, data cleaning, structural topic modeling, predictive modeling, natural language processing, time series analysis, machine learning, Survey Monkey, REDcap, Git, Jira, Confluence, IRB and HIPPA regulations, Microsoft Suite.

CERTIFICATIONS

Cyber Security Training, Good Clinical Practice (CITI), Collaborative Institutional Training Initiative (CITI).

PUBLICATIONS

Thibau, I., **Mantell, B**., Smith Begolka, W. (2025, Feburary). **Eczema Patient and Caregiver Willingness to Engage in a Mobile Health App for Disease Management and Shared Decision Making.** Journal of Medical Internet Research (In Review).

Smith Begolka, W., Thibau, I., **Mantell, B.** (2024, December). **Opportunities to identify and address real-world health disparities using data from a patient-facing eczema self-management mobile app.** American Academy of Dermatology (In Review).

Ducker, A., Thibau, I., **Mantell, B.**, Daintly, K.., Wyke, M., Smith Begolka, W. (2024, August). **Consensus on a patient-centered definition of atopic dermatitis flare: a modified eDelphi approach.** Journal of the American Medical Association - Dermatology.

University of Oregon Science and Treatment of Affect Regulation Team — *Project Coordinator / Data Manager*

September 2019 - August 2023

- Manage the lab's data pipeline by developing and optimizing Qualtrics and Redcap modules with complex branching logic, ensuring accurate and efficient data collection tailored to diverse research needs.
- Lead automation initiatives for data uploads using R, directing a large project with multiple research assistants to streamline the integration of 14 unique measures into the NIMH Data Archive.
- Coordinate and execute all data requests from graduate students for publications, ensuring timely access to relevant datasets, facilitating collaborative research efforts, and supporting the successful completion of academic projects.

University of Oregon Social & Affective Neuroscience Lab — *Senior Research Assistant*

September 2019 - August 2023

- Run participants through MRI tasks to collect structural MRI, fMRI, resting state, and diffusion-tensor images, utilizing MATLAB in conjunction with MRI protocols to administer tasks and ensure accurate data capture of physiological responses during imaging sessions, ultimately enhancing the exploration of brain activity and structure.
- Gather body composition data using BODPOD technology alongside height and weight measurements, and collect urine samples for stress marker analysis, contributing to comprehensive physiological assessments that inform the study's health outcomes.

University of Oregon Transdiagnostic Aspects of Psychopathology — *Research Assistant*

September 2017 - July 2018

- Acquire dense-array EEG data using geodesic sensor nets and Net Station Acquisition software, ensuring high-quality neurophysiological recordings for research studies.
- Conduct data cleaning and artifact detection using Net Station Tools, enhancing data integrity and reliability for subsequent analyses.
- Develop a qualitative coding procedure for questionnaires, contributing to the systematic analysis of qualitative data and enhancing research rigor.
- Coordinate data scoring for survey data and the emotional Stroop words, ensuring accurate and timely processing of participant responses for analysis.

Smith Begolka, W., Thibau, I., **Mantell, B.**, Daintly, K., Wyke, M., Ducker, A. (2024, June). **Establishing a patient-centered definition of atopic dermatitis flare: insights from a modified eDelphi study.** Revolutionizing Atopic Dermatitis.

Thibau, I., **Mantell, B.**, Smith Begolka, W. (2024, January). **Real-World Assessment of Systemic Treatment Usage for Atopic Dermatitis.** American Academy of Dermatology.

Smith, B., Tomiyama, J., Berkman, E., John, D., **Mantell, B.** (December, 2022) **The Mediating Role of Income, Healthy Food Availability, and Consumption in Rural Health Disparities.** Journal of Rural Health.

Schultz, K., **Mantell, B.**, Berkman, E., Swann, N. (December, 2021) **Prepared and Reactive Inhibition in Smokers and Non-Smokers.** Biorxiv.

Lee, A.H., **Mantell, B.**, Stepp, S.D., & Zalewski, M. (2021, April). **Preschooler negativity predicts increased observational maternal negativity for dyads in which mothers have Borderline Personality Disorder.** Symposium submitted and conducted at the Society for Research in Child Development Biennial Meeting, Minneapolis, Mn.

Lee, A.H., **Mantell, B.**, Clark, A.A., Zarosinski, A. & Zalewski, M. (2021, April). **Associations Between Parental Apology, Parenting, and Child Psychosocial Outcomes. Poster submitted and presented at the Society for Research in Child Development.** Biennial Meeting, Minneapolis, Mn.

EDUCATION

University of Oregon, *Eugene — B.S. Psychology + Minor in Computer Information Technology*
Obtained June 2019