Josue E. Rodriguez

EDUCATION

University of California, Davis — Davis, CA
PhD, Quantitative Psychology — Expected 2024
Emphasis in Computational Social Science

Humboldt State University — Arcata, CA
MA, Experimental Psychology — 2019
Minor in Statistics
BA, Psychology — 2017

EXPERIENCE

Data Scientist Intern, Spacee — 2021-present
Conducted exploratory data analysis, developed unsupervised learning models, and performed research around data key to successful company products and metrics. Implemented Python code into a core data pipeline and conducted field research around the company's operational envelope. Brought an industrious and enthusiastic attitude to work every day.

PUBLICATIONS

Peer-reviewed

2. Karr, J. E., **Rodriguez, J. E.**, Goh, P. K., Martel, M. M., and Rast, P. (2021b). The unity and diversity of executive functions: A network approach to lifespan development. . Accepted at *Developmental Psychology*.

1. Williams, D. R. and **Rodriguez, J. E.** (2020). Why Overfitting is Not (Usually) a Problem in Partial Correlation Networks. preprint. Accepted at *Psychological Methods*.

Under Review

4. **Rodriguez, J. E.**, Williams, D. R., and Bürkner, P.-C. (2021a). Heterogeneous Heterogeneity by Default: Testing categorical moderators in random-effects meta-analysis. preprint. Under review at *Psychological Methods*.

3. **Rodriguez, J. E.**, Williams, D. R., and Rast, P. (2021b). Who Is and Is Not "Average"? Random effects selection with spike-and-slab priors. preprint. Under review at *Psychological Methods*.

2. **Rodriguez, J. E.** and Williams, D. R. (2021). Painless posterior sampling: Bayesian bootstrapped correlation coefficients. preprint. Under review at *The Quantitative Methods for Psychology*.

1. Karr, J. E., **Rodriguez, J. E.**, Goh, P. K., Martel, M. M., and Rast, P. (2021a). A network analysis of executive functions in children and adolescents with and without attention-deficit/hyperactivity disorder. Under review at *Developmental Neuropsychology*.

Working Papers

3. Williams, D. R., **Rodriguez, J. E.**, and Bürkner, P.-C. (2021). Putting Variation into Variance: Modeling between-study heterogeneity in meta-analysis. preprint.

2. Rast, P., Martin, S. R., and **Rodriguez, J. E.** (2020). Bayesian multivariate garch models for within-person variance forecasting. preprint.

1. **Rodriguez, J.E.**, Williams, D. R., Rast, P., and Mulder, J. (2020). On Formalizing Theoretical Expectations: Bayesian Testing of Central Structures in Psychological Networks. preprint.

POSTER PRESENTATIONS

6. Hang, S., **Rodriguez, J. E.**, Garcia, R., and Kilgore, H. (2018). Assessment of peripheral BDNF variability over 30 days in healthy adults. 48th annual meeting of the Society for Neuroscience. San Diego, CA, United States

5. Chu, B., **Rodriguez, J. E.**, Sherburne, B., and Gaffney, A. M. (2018). Hella dope, confident understanding mediates the relationship between slang and multiple belonging needs. 16th meeting of the International Conference on Language and Social Psychology. Edmonton, Alberta, Canada

4. Ortiz, N., **Rodriguez, J. E.**, Sherburne, B., Joma, V., and Aberson, C. (2018). Blaming it on affirmative action: perceptions of denied opportunity. 98th annual meeting of the Western Psychological Association. Portland, OR, United States
3. Siefert, E., Scott, B., **Rodriguez, J. E.**, Chu, B., Kijsriopas, B., and Gaffney, A. M. (2018). Confidence of understanding mediates the relationship between ingroup slang and a sense of peer similarity. 98th annual meeting of the Western Psychological Association. Portland, OR, United States
2. Kuljian, O., Sherburne, B., Camarena, J., **Rodriguez, J. E.**, Hackett, J. D., and Gaffney, A. M. (2018). Effects of nationalist leadership on identification with humanity. 19th annual meeting of the Society for Personality and Social Psychology. Atlanta, GA, United States
1. **Rodriguez, J. E.**, Sanchez, K., Camarena, J., Clark, C., and Swancoat, B. (2017). Mazes and memory: lifestyle and experience in spatial ability. 97th annual meeting of the Western Psychological Association, Sacramento, CA, United States

SOFTWARE

5. **blsmeta** (author). An `R` package for Bayesian meta-analytic models, including fixed-effects, two-level, and three-level random-effects models. Moderators can be included for both the location and scale parameters via location-scale modeling. GitHub.
4. **psymetadata** (creator). An `R` package containing a collection of documented open datasets from meta-analyses in psychology research CRAN. GitHub.
3. **glaxo** (creator). An `R` package implementing the relaxed lasso algorithm for Gaussian Graphical Models GitHub.
2. **BBcor** (author). An `R` package for efficient sampling from the posterior distribution of various correlation coefficients. CRAN. GitHub.
1. **bayeslincom** (creator). An `R` package for testing linear combinations of Bayesian posterior samples. CRAN. GitHub.

TEACHING EXPERIENCE

Graduate Student Teaching Assistant — University of California, Davis
Statistical Analysis of Experiments — 2021-present
Graduate Student Teaching Assistant — Humboldt State University
Introduction to Statistics — 2017-2019
Social Psychology — 2018

COURSEWORK

- Probability Theory
- Analysis of Variance
- Multivariate Statistics
- Applied Bayesian Statistics
- Multilevel Modeling
- Regression Analysis
- Computational Social Science
- Psychometrics
- Causal Modeling

HONORS AND AWARDS

- NASEM FORD Fellowship, Honorable Mention — 2020
- Outstanding Student of the Year Nominee, Humboldt State University — 2017
- Presidential Scholar, Humboldt State University — 2017
- Woolford Fellow of the Eureka Rotary Club — 2017

PROFESSIONAL CERTIFICATIONS

DataCamp
Data scientist with Python — 2018
Data scientist with R — 2018

TECHNICAL SKILLS

- **Programming:** R (expert), Python (proficient), SQL (proficient), HTML (competent), CSS (novice), C# (novice)
- **Tools:** LaTeX, Git, Docker, SPSS, Mathematica, Tableau, MATLAB, Snowflake, Airflow

AD-HOC REVIEWER

- Entropy (under the Supervision of Dr. Philippe Rast)
- Advances in Methods and Practices in Psychological Science