# Josue E. Rodriguez

# **EDUCATION**

University of California, Davis
PhD, Quantitative Psychology
Expected 2024

Emphasis in Computational Social Science

**Humboldt State University** Arcata, CA

MA, Experimental Psychology
Minor in Statistics
2019

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

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

- 3. **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.
- 2. **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*.
- 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 <u>CRAN</u>. <u>GitHub</u>.
- 3. **glaxo** (creator). An **R** package implementing the relaxed lasso algorithm for Gaussian Graphical Models <u>GitHub.</u>
- 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

<b>Graduate Student Teaching Assistant</b>
Statistical Analysis of Experiments
<b>Graduate Student Teaching Assistant</b>
Introduction to Statistics
Social Psychology

University of California, Davis 2021-present Humboldt State University 2017-2019 2018

#### COURSEWORK

<ul> <li>Probability Theory</li> </ul>
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- 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

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