# Brendon Jerome Butler

#### EXPERIENCE

# Associate Data Scientist & Engineer

Irvine Company

June 2019 - Present Irvine, CA

Sep. 2014 - May 2019

## Graduate Research Fellow

University of California, Irvine

Irvine, CA

- Designed and conducted experiments investigating how humans retrieve information from memory
- Built hierarchical linear and logistic regression models in R and Python to predict how accurately humans retrieve information from memory under different task demands with less than 5% margin of error
- Published findings in peer-reviewed academic journals and presented findings at conferences
- Secured over \$100,000 in research funding via grants and external fellowships

## Graduate Teaching Assistant

Sep. 2015 – May 2017

Dec. 2019 (expected)

University of California, Irvine

Irvine, CA

- Taught course curriculum in one- to three-hour classroom sessions
- Led class discussions and answered student questions
- Evaluated more than 500 student essays, projects, labs, tests, and other assessments
- Maintained records on progress and grades for over 300 students

#### **EDUCATION**

## PhD, Psychological Science

University of California, Irvine

Irvine, CA

- Minor: Quantitative Methods
- **Dissertation:** Retrieval-Enhanced Suggestibility: A Theoretical and Meta-Analytic Review
- Honors: National Science Foundation Graduate Research Fellowship (NSF-GRFP); Honorable Mention, Ford Foundation Predoctoral and Dissertation Fellowships
- Relevant Coursework: Linear & Logistic Regression; Multilevel Modeling; Econometrics; Structural Equation Modeling; Bayesian Cognitive Modeling; Machine Learning; Longitudinal Data Analysis; Data Science

#### MA, Social Ecology

May 2017

University of California, Irvine

Irvine, CA

• Thesis: Failure to Detect Discrepancies Drives Retrieval-Enhanced Suggestibility

#### BA, Psychology

June 2012

University of California, Riverside

Riverside, CA

## TECHNICAL SKILLS

Languages: Python, R, SQL

Machine learning: Supervised and Unsupervised models (binary and multi-class classification, clustering, decision trees, random forest)

Statistical modeling: Linear regression, logistic regression, Bayesian analysis, survival analysis Data cleaning & visualization: Pandas, dplyr, Tableau, matplotlib, Seaborn, ggplot2

Research: Experimental Design, Hypothesis Testing, A/B Testing

Other Software & Technologies: STATA, SPSS, Microsoft Office, Google Cloud Platform (Big Query), LATEX

## Projects & **PUBLICATIONS**

# Discrepancy detection in the retrieval-enhanced suggestibility paradigm

Publication

- Designed and conducted laboratory experiments to assess memory retrieval
- Built linear and logistic hierarchical regression models in R and Python to assess and predict memory performance

#### Predicting car prices

Project

• Used scikit-learn's k-nearest neighbor algorithm and cross-validation tools to predict a car's sale price based on its features