

# Brian K. Hurley

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## EXPERIENCE

### Humu, Mountainview, California — *People Scientist*

MAY 2019 - PRESENT

- Assess the impact of Humu's product on business outcomes (e.g., productivity, retention), using predictive modeling, time series analysis, and causal inference/synthetic controls. Provided first causal evidence of product impact on a client company's KPI (8% productivity lift for call center employees)
- Developing NLP procedures for surfacing insights from unstructured text, both as a scalable product feature and for custom client analyses
- Work with stakeholders to identify and best solve their needs using data. Communicate quantitative insights to stakeholders in clear, actionable terms
- Collaborate cross-functionally with Engineering, People Science, Privacy, UX Research, Sales, and Leadership to shape business decisions around data and analytics

### Facebook, Menlo Park, California — *People Research Scientist*

APRIL 2018 – MAY 2019

- Developed a topic modeling solution to extract themes and describe topic distributions from open-ended survey comments, diminishing the resource-intensive need to manually review comments
- Created a comprehensive set of quantitative and text analytics for Facebook's Internal Communications team (the first of its kind for this group), impacting executive-level decision-making
- Mined transportation, badge, employee churn, and survey data to understand the impact of commutes on employee attrition, influencing location and transportation decisions
- Collaborated cross-functionally with partners from Internal Communications, Compensation, Location Strategy, BizApps, and Facilities to maximize business impact of analyses
- Distilled rigorous quantitative analytics into practical, actionable insights for stakeholders

### Insight Data Science, Palo Alto, California — *Data Science Fellow*

JANUARY 2018 - APRIL 2018

- Developed [BeatTheCrowd](#) — a data product to predict crowd levels for Bay Area Rapid Transit (BART) passengers — in Python from conception to deployment
- Collected 7 years of hourly BART ridership data, scraped 7 years of weather history from Weather Underground, designed a PostgreSQL database for data storage
- Predicted passenger volume using random forest with 93% accuracy.
- Deployed with front-end interface using Flask to return crowd predictions based on user input

## EDUCATION

### University of California, Davis

*PhD, Psychology (Cognitive Neuroscience)*

JANUARY 2018

### University of Texas at Dallas

*BA, Psychology, Magna Cum Laude*

MAY 2010

School of Behavioral & Brain Sciences Honors with Distinction

## SKILLS

### Languages:

R, Python, SQL, MATLAB

### Statistics/Machine Learning:

*Supervised learning* (e.g., linear regression, logistic regression, random forest), *unsupervised learning* (e.g., clustering, dimensionality reduction, LDA), *NLP* (e.g., topic modeling, content similarity, entity recognition), *hypothesis testing*, *regularization*, *Bayesian inference*, *mixed-effects models*, *causal inference*

## SIDE PROJECTS

### [Diablo Velo](#)

Used historical data from Strava API and weather data scraped from Weather Underground to predict cycling speed on Mount Diablo