# Robert Brown

Oakland, CA | 510-463-1142 | rbrtebrwn@gmail.com | linkedin.com/in/rbrtebrwn | https://github.com/elreb

## SKILLS

**Programming Languages:** Python, R, SQL, SAS, Bash, Javascript, HTML/CSS, LaTeX
**Tools:** Pandas, NumPy, Scikit-learn, TensorFlow, AWS, Matplotlib, ggplot2, Flask, Shiny, D3.js, Dash, Tableau
**Machine Learning/Statistics:** regression, ensemble methods, dimensionality reduction, regularization, clustering, NLP, neural networks

## EXPERIENCE

**Health Data Science Fellow,** *Insight,* San Francisco, CA 9/2020 - present

- Consulted with a San Francisco Bay Area county to provide a churn model to using behavioral health records which will provide alerts to providers and case managers to improve treatment retention
- Used advanced SQL querying to bring together up to 10 various tables, and engineered features such as generating a health score based off time series momentum
- Used survivor analysis to generate a probability of churning over time as well as built a binary classifier using logistic regression with lasso regularization to achieve 78% ROC AUC

**Epidemiologist II,** *Alameda County Department of Public Health,* Oakland, CA 8/2018 - 9/2020

- Developed time-series, clustering and predictive analytic reports and dashboards using R, SQL, ArcGIS and SAS to track spread and prevalence of 70+ communicable diseases, such as HIV, TB and COVID-19, in Alameda county
- Provided leadership for the Incident Command System (ICS) response for the county against COVID-19 as the Data Branch Chief, managing up to 25 staff members including other epidemiologists, analysts and project staff
- Built the counties first COVID-19 case and contact investigation database, that contained over 15,000 records and 120 users complete with batch file versioning, a SQL Server backend, and many advanced VBA features

**Resident Data Scientist,** *Method Data Science,* Remote 11/2018 - 4/2019

- Created an ensemble machine learning algorithm (R) to predict if and when a hip replacement surgery will be needed using EHR and insurance data for a Bay Area biotech start-up with 77% AUC
- Developed a Dash (Python) dashboard using unsupervised learning to segment customers to create targeted marketing resulting in 13% increase in customer base within 6 months

**Statistician,** *UCSF,* San Francisco, CA 5/2017 - 8/2017

- Consulted with several research teams to provide multiple high dimensional figures, and provided mathematical modeling and statistical for publications on multi-drug resistant tuberculosis (R)
- Provided multiple imputation on survey question that was systematically missing by sourcing comparable datasets resulting in being able to use validated survey tool

## EDUCATION

**MPH** in Epidemiology and Biostatistics**,** UC Berkeley – Berkeley, CA **May 2017**

**B.S.** in Neurobiology, Physiology and Behavior, **BA** in Psychology**,** UC Davis – Davis, CA **May**

**2011**