

Daniel Kent

San Francisco, CA

✉ dnkent24@gmail.com | ☎ 925.818.9866 | 🌐 dnkent.github.io | 🐙 dnkent | 🌐 dnkent

SKILLS

LANGUAGES Python (4+ years) • R (6+ years) • SQL (BigQuery / Microsoft SQL Server / Oracle SQL Developer)

TOOLS & LIBRARIES pandas • numpy • scikit-learn • statsmodels • scipy • matplotlib • seaborn • Git/GitHub • Google Cloud Computing • Apache Spark • xgboost • H2O • caret • tidyverse • ggplot2 • Linux/Unix

MACHINE LEARNING AND STATISTICS supervised and unsupervised learning (regularized regression, random forests, gradient boosting machines, neural networks, KNN, SVM, PCA, k-means) • causal inference (matching, regression discontinuity designs, difference-in-differences, instrumental variables, heterogeneous treatment effects) • experimental design & A/B testing • generalized linear models • time series analysis • Bayesian inference

PROFESSIONAL EXPERIENCE

DATA SCIENTIST

KAISER PERMANENTE PREDICTIVE ANALYTICS AND MODELING

January 2021 – Present

- Responsible for three data science pipelines that inform account management decisions in a strategic marketplace
- Currently monitoring two machine learning models in production and developing a recommendation engine approach for prescribing optimal repositioning strategies to grow membership in accounts across California
- Co-lead monthly updates of an application with data on over 16,000 accounts and 6,500,000 members
- Revamped model in production for forecasting when accounts are at-risk of terminating with Kaiser Permanente, producing a 14% increase in overall accuracy, 15% decrease in false positives, and 10% decrease in false negatives

GRADUATE RESEARCH ASSOCIATE

THE OHIO STATE UNIVERSITY DEPARTMENT OF POLITICAL SCIENCE

August 2016 – August 2020

- Forecasted international conflicts in dissertation with a stacked ensemble trained on 800,000+ observations
- Estimated causal effects regarding public opinion toward foreign policy in a 2,500 participant survey experiment
- Secured over \$50,000 in research funding through the National Science Foundation and Ohio State University
- Wrote novel R package, **dynamr**, returning 20% increase in changepoint detection accuracy over existing software
- Served as research consultant for data, programming, and modeling problems in a faculty-awarded position

PROGRAM REPRESENTATIVE

UC DAVIS GLOBAL STUDY PROGRAM

June 2013 – August 2015

- Advised and coordinated tuition, healthcare, and housing for over 1,000 international students at UC Davis
- Billed and tracked over \$15,000,000 in student tuition and health insurance enrollment payments

PUBLICATIONS

- [1] Daniel Kent, Skyler J. Cranmer, and James D. Wilson. *A Permutation-Based Changepoint Technique for Monitoring Effect Sizes*. *Political Analysis*, 1-12. doi:10.1017/pan.2020.44.
- [2] Daniel Silverman, Daniel Kent, and Christopher Gelpi. *Putting Terror in its Place: An Experiment on Mitigating Fears of Terrorism Among the American Public*. Invited to Revise and Resubmit at *Journal of Conflict Resolution*.
- [3] J. Andres Gannon and Daniel Kent. *Why Weakly Allied States Make Committed Coalition Partners*. *Journal of Conflict Resolution*, 65(5), 889–918. doi:10.1177/0022002720978800.

EDUCATION

THE OHIO STATE UNIVERSITY

PH.D., POLITICAL SCIENCE (Focus on Computational Social Science)

M.A., POLITICAL SCIENCE

Columbus, OH

August 2020

May 2017

UNIVERSITY OF CALIFORNIA, DAVIS

B.A., INTERNATIONAL RELATIONS (Highest Honors)

Davis, CA

June 2013