# Daniel Kent

Walnut Creek, CA
✉ dnkent24@gmail.com | 📱 925.818.9866 | 🌐 dnkent.github.io | ⊙ dnkent | in dnkent

## SKILLS

**LANGUAGES** Python (3+ years) • R (5+ years) • SQL (MySQL / SQLite)

**TOOLS** pandas • scikit-learn • statsmodels • numpy • scipy • matplotlib • seaborn • plotly • Git • Amazon Web Services • Apache Spark • cluster computing • H20 • caret • dplyr • tidyr • purrr • ggplot2 • Linux/Unix

**MACHINE LEARNING AND STATISTICS** supervised and unsupervised learning (neural networks, random forests, gradient boosting machines, regularized regression, KNN, SVM, PCA, K-Means) • causal inference • generalized linear models • experimental design • network analysis • time series analysis • Bayesian inference • hypothesis testing

## PROFESSIONAL EXPERIENCE

### GRADUATE RESEARCH ASSOCIATE
PVLITICAL SCIENCE | THE OHIO STATE UNIVERSITY                    August 2016 – August 2020
- Developed machine learning approaches for forecasting international conflicts and estimating network effects
- Forecasted international conflicts with a stacked ensemble trained on a random forest, gradient boosting machine, and regularized regression as base learners, using a data set with 800,000+ observations and 40+ features
- Engineered a novel statistical feature with 16,000 estimates of every country's international standing, 1816-2012
- Secured over $50,000 in external research funding for projects through the National Science Foundation, Mershon Center for International Security, and Ohio State Decision Sciences Collaborative
- Designed, implemented, and estimated causal effects on a nationwide survey experiment with 2,500 participants
- Wrote novel R package, `dynamr`, returning 20% increase in changepoint detection accuracy over existing software

### JUNIOR FELLOW, PROGRAM IN STATISTICS AND METHODOLOGY
POLITICAL SCIENCE | THE OHIO STATE UNIVERSITY                    August 2017 – July 2018
- Served as research consultant for data, programming, and modeling problems in a faculty-awarded position
- Led and hosted 4 data science training workshops and visiting guest lectures throughout the academic year

### PROGRAM REPRESENTATIVE
GLOBAL STUDY PROGRAM | UC DAVIS                    June 2013 – August 2015
- Advised and coordinated student tuition, health services, housing, and transcripts for over 1,000 international students from 15+ countries and 4 continents studying abroad at UC Davis
- Billed and tracked over $15,000,000 in student tuition and health insurance enrollment payments

## PROJECTS

[1] Daniel Kent, Skyler J. Cranmer, and James D. Wilson. *A Permutation-Based Changepoint Technique for Monitoring Effect Sizes*. Forthcoming at *Political Analysis*.

[2] Daniel Silverman, Daniel Kent, and Christopher Gelpi. *Putting Terror in its Place: An Experiment on Mitigating Fears of Terrorism Among the American Public*. Under Review.

[3] J. Andres Gannon and Daniel Kent. *Keeping Your Friends Close, But Acquaintances Closer: Why Weakly Allied States Make Committed Coalition Partners*. Forthcoming at *Journal of Conflict Resolution*.

## EDUCATION

**THE OHIO STATE UNIVERSITY**                    Columbus, OH
PH.D., POLITICAL SCIENCE (Focus on Computational Social Science)                    August 2020
M.A., POLITICAL SCIENCE                    May 2017

**UNIVERSITY OF CALIFORNIA, DAVIS**                    Davis, CA
B.A., INTERNATIONAL RELATIONS (Highest Honors)                    June 2013