Daniel Kent

Columbus, Ohio

✉ kent.249@osu.edu | ☐ 925.818.9866 | 🌐 dnkent.github.io | ⌨ dnkent | 🔗 dnkent

SKILLS

SOFTWARE R (5+ years) • Python (3+ years) • SQL (MySQL / SQLite) • Git • Unix / Bash • LaTeX • Julia

QUANTITATIVE Machine Learning • Social Network Analysis • Causal Inference • Time Series Analysis • Bayesian Inference • Experimental Design • Generalized Linear Models and Regression • Probability Theory

PLATFORMS Cluster Computing • Linux • Google Cloud Platform • Amazon Web Services

EXPERIENCE

THE OHIO STATE UNIVERSITY — Columbus, OH

PH.D. CANDIDATE, POLITICAL SCIENCE — August 2015 – Present

Dissertation: **Essays on Machine Learning in International Conflict and Social Networks**

- Built machine learning ensembles in R with 800,000+ observations to forecast the onset of international conflict
- Developed a novel dataset with 15,925 estimates of every country's international standing from 1816-2012
- Applied causal forests to experiments in social networks in order to detect heterogeneous spillover effects

GRADUATE RESEARCH ASSOCIATE — August 2018 – Present

- Estimated social networks of over 400,000 Cold War bureaucrats by classifying matches in archival records
- Wrote R package, `dynamr`, returning 20% increase in changepoint detection accuracy over alternative software
- Awarded a $20,000 grant, funded by the National Science Foundation for a nationwide survey experiment
- Collaborated on 4 research teams, coordinating with members across multiple countries and states

GRADUATE TEACHING ASSOCIATE — July 2019

- Taught graduate-level mathematics course for 15 incoming Ph.D. students, with an emphasis on applied statistics
- Instructed on 45 topics from calculus (derivatives, integrals, and multivariate), linear algebra, and set notation
- Compiled a 50-page set of extensive course notes for students to reference during future statistics coursework

JUNIOR PRISM FELLOW — July 2017 – August 2018

- Served in faculty-awarded position, held by one graduate student each year based on coursework performance
- Provided statistics consulting for faculty and students, solving data, programming, and modeling problems
- Spearheaded 4 data science training workshops and guest lectures throughout the academic year

RESEARCH

[1] Daniel Kent, Skyler J. Cranmer, and James D. Wilson. *A Permutation-Based Changepoint Technique for Monitoring Effect Sizes*. Conditionally Accepted 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*. Invited to Revise and Resubmit 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