JAE YEON KIM

Overview

- Computational social scientist: using data science to study the politics of diversity and inclusion
- Research software developer: building tools that make digital data collection easier and faster
- Experience: analyzing survey, experimental, administrative, and text data using statistical and machine learning methods

EDUCATION

2016 | Present
University of California, Berkeley
PhD Candidate in Political Science — Berkeley, California, USA

Summer 2019
Summer Institute in Computational Social Science
Participant (10% acceptance rate)
Princeton University, Princeton, USA

2014 | 2016
University of California, Berkeley
MA in Political Science — Berkeley, California, USA

2012
Korea University
BA in Political Science and English (completed exchange student programs in Hong Kong and Taiwan)
Seoul, South Korea

PROFESSIONAL EXPERIENCE

September 2020 | Present
Visiting Fellow
P3 Lab, SNF Agora Institute — Johns Hopkins University,
- Collaborated with Milan de Vries (former Director of Analytics at MoveOn.Org)
- Parsed more than 3 million tax reports (XML files stored in Amazon AWS) filed by nonprofits in the United States and linked this data source with these organizations' websites and social media handles
- Designed and built a data infrastructure that tracks civic organizations in the US and their relationships with food security, polarization, and the 2020 racial justice movement

May 2019 | Present
Senior Data Science Fellow, Instructor, and Statistical Consultant
Data-intensive Social Sciences Lab — UC Berkeley
- Developed a Shiny dashboard for inspecting input features and predicted outcomes of the D-Lab's Online Hate Speech Index Project
- Consulted 70+ Berkeley faculty, students, and staff on applied statistics, machine learning, and database management
- Taught 7 original workshops on machine learning, functional programming, package development, advanced data wrangling, and reproducible project management

Last updated on 2020-12-05.

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For more information, please contact me via email.

COURSEWORK

Statistical and Causal Inference, Experimental Design, Survey Methods, Game Theory, Computational Social Science

Passed Political Behavior (social and cognitive psychology, survey and experimental design) field exam with distinction

SKILLS

Quantitative: Statistical and causal inference, Experimental and survey design

Computational: Natural language processing, Machine learning, R (tidyverse, tidymodels, statistical packages), Python (pandas, scikit-learn), Git, SQL (PostgreSQL), NoSQL (MongoDB), Linux Command Line

Spring 2020

Data Science Education Program Fellow [Blog post]
Data Science Education Program — UC Berkeley

- Served as research lead for the undergraduate students and project partners involved in 40+ data science discovery projects
- Taught original workshops on project management, computational reproducibility, bias in machine learning, and data visualization

Fall 2016 | Present

Graduate Student Instructor [Original textbook]
Department of Political Science — UC Berkeley

- Developed and taught an original graduate-level course on computational tools for social science research as an instructor
- Taught an undergraduate-level applied statistics as a teaching assistant and received **the Outstanding Graduate Student Instructor Award**, which is given to less than 10% of Berkeley TAs

SOFTWARE

tidytweetjson: R package for turning Tweet JSON files into a cleaned and wrangled dataset. The package takes 12.34 seconds to turn 5,685 articles into a tidy dataframe.

tidyethnicnews: R package for turning search results from one of the largest databases on ethnic newspapers and magazines published in the United States into a cleaned and wrangled dataset. The package takes 4 minutes to turn 2 million tweets into a tidy dataframe.

TidyChaseBankStatements: R Package for turning Chase bank Statements into a tidy dataframe.

PEER-REVIEWED PUBLICATIONS

Kim J. (2020). Integrating Human and Machine Coding to Measure Political Issues in Ethnic Newspaper Articles. *Journal of Computational Social Science*. Forthcoming.

- Winner of the **Don T. Nakanishi Award for Distinguished Scholarship and Service in Asian Pacific American Politics**, Western Political Science Association (2020)

Kim J, Carlos Ortiz, Sarah Nam, Sarah Santiago, and Vivek Datta. (2020). Intersectional Bias in Hate Speech and Abusive Language Datasets. 2020. *Proceedings of the Fourteenth International Conference on Web and Social Media (ICWSM), Data Challenge Workshop*

Kim J. (2020). How Other Minorities Gained Access: The War on Poverty and Asian American and Latino Community Organizing. *Political Research Quarterly*. Forthcoming.

Kim J. (2020). Racism Is Not Enough: Minority Coalition Building in San Francisco, Seattle, and Vancouver. *Studies in American Political Development*, 34(2), 195-215.

RESEARCH EXPERIENCE

Summer 2020 | Present

Large-scale Twitter Analysis on COVID-19 and Anti-Asian Climate [GitHub] [Preprint]
PhD Candidate — UC Berkeley

- Developed an R package that automates parsing a large Tweet JSON file (>5GB) into a cleaned and wrangled dataset
- Applied dynamic topic modeling to 1.4 million tweets and traced the rise of anti-Asian sentiment in the post-pandemic US

Fellowships: Democracy Visiting Fellowship, Ash Center for Democratic Governance and Innovation, Kennedy School, Harvard University (2020, declined), Social Media Research Fellowship, D-Lab and Social Science Matrix, UC Berkeley (2020, declined), D-Lab Data Science Fellowship, UC Berkeley (2020), Data Science Education Program Fellowship, UC Berkeley (2020), American Democracy Project Fellowship, UC Berkeley (2019), California Poverty and Socioeconomic Inequality Fellows Program, the Blum Initiative for Global and Regional Poverty Studies (2017), Berkeley Empirical Legal Studies Graduate Fellowship, Center for the Study of Law and Society, UC Berkeley (2017)

Awards: Don T. Nakanishi Award for Distinguished Scholarship and Service in Asian Pacific American Politics, Western Political Science Association (2020), Outstanding Graduate Student Instructor Award, UC Berkeley (2016)

Fall 2019 | Present

Causal Inference and Machine Learning [GitHub] [Preprint]
PhD Candidate — UC Berkeley
- Developed an R package that automates parsing ethnic newspaper articles (in HTML format) into a cleaned and wrangled dataset
- Used a natural experiment and machine learning to examine how threats prompt information seeking among marginalized populations

Spring 2020

Intersectional Bias in Hate Speech and Abusive Language Detection Datasets [GitHub] [Preprint]
PhD Candidate — UC Berkeley
- Demonstrated African American tweets were up to 3.7 times more likely to be labeled as abusive, and African American male tweets were up to 77% more likely to be labeled as hateful compared to the others

Fall 2018 | Spring 2019

Natural Language Processing and Machine Learning [GitHub] [Preprint]
PhD Candidate — UC Berkeley
- Demonstrated unreliable training data generates weak predictions and extreme interpretations using 80k+ ethnic newspaper articles

2016 | 2018

Statistical Modeling of Time Series Data [GitHub] [Preprint]
PhD Candidate — UC Berkeley
- Examined how social policy influenced community organizing among Asian Americans and Latinos by creating an original organizational dataset and modeling time-series data

2019 | Spring 2020

Survey and Experimental Research [GitHub] [Preprint]
PhD Candidate — UC Berkeley
- Designed a within-subject experiment and embedded it in a California-wide survey to investigate how different racial groups interpret questions on racial solidarity differently

Summer 2018

Survey Research [GitHub]
Graduate Student Researcher — UC Berkeley
- Cleaned and wrangled the largest panel survey data on Asian Americans and conducted factor and regression analysis

ORGANIZING EXPERIENCE

Summer Institute in Computational Social Science in the San Francisco Bay Area [Blog post]
Co-organizer — August 2019 - July 2020
- Raised 50k+, reviewed 100+ applicants and selected 20 participants
- Developed close partnerships with Bay Area nonprofits (e.g., Code for America, DonorsChoose, Hopelab)