

EDUCATION

- UC San Diego: PhD in Economics, May 2017
- University of Tokyo: Masters in Public Policy, Apr 2012
- UC Berkeley: BEng in Industrial Engineering, Dec 2007

EMPLOYMENT

Research Scientist	Fiscalnote	2019-Present
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- Time split between product and academic work. Technical work focused on machine learning: NLP, Deep Learning, AWS, Python, rapid prototyping. Academic work focused on both applied ML and methodological innovation at the intersection of NLP and political science.
- Tech lead in a data-to-text content generation project.

Data Scientist	Pew Research Center Data Labs	2017 - 2019
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- Led a team of 4 in research projects - from initial idea generation to the design of back-end infrastructure and data analysis. Trained and deployed a neural network model to more than 100K images using Transfer Learning. Python/R/Django/AWS/Docker
- Conceptualized and developed a geodatabase that allows researchers to study how attitudes of survey respondents overlay with geographic components.

Fellow	Data Science for Social Good	2016
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- Built a machine learning prediction model to identify key risk factors of interacting with the juvenile criminal justice system for the Milwaukee public schools.
- Contributed to end-to-end data pipeline that is comprised of ETL, model training, validation, deployment and inference. Model performs 87% better than the baseline in identifying students at risk. Python/SQL/Command Line Tools

Teaching Assistant	UC San Diego	2012 - 2017
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- 11 undergraduate courses, including introductory and intermediate microeconomics sequences

Analyst	BlackRock	2008-2010
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- Supported internal and external users of BlackRock's risk management software enterprise system (Aladdin). Specific tasks included writing SQL queries to identify trades as well as providing software training to users.

Engineering Intern	Intel	2006
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- Developed metrics to measure equipment and factory capacity and output, identified run rate improvement projects, established accident prevention measures and planned training programs for personnel

RESEARCH

Academic Papers

- **Advertisers Capture: Evidence from Hong Kong** (Under Review)
Covered By: Marginal Revolution
- **Measuring Subjectivity in History Textbooks** (R&R)
Covered By: BBC
- **Political Shifts and Public Responses to Agency Action**, with Michael Livermore and Vlad Eidelman, (Submitted)

Public Facing

- **Men Appear Twice as Often as Women in News Photos on Facebook**, *May 2019* (with Stefan Wojcik, Brian Broderick and Adam Hughes)
Covered by: Adweek, Forbes, PCMag, Nieman Lab, Multichannel News, Washington Post, The Lily
- **Gender and Jobs in Online Image Search**, *Dec 2018* (with Stefan Wojcik, Brian Broderick and Adam Hughes)
Covered by: CNN, The Washington Post, Mercury News, USA Today, Mother Jones, Mercury News, East Bay Times, The Lily, MarketWatch
- **How far Americans live from the closest hospital differs by community type**, *Dec 2018* (with Brian Broderick and Skye Toor)
Covered by: CityLab, American Organization for Nursing Leadership, Mississippi Health Advocacy Program
- **What Google searches can tell us about Americans' interest in guns**, *Mar 2018*
- **There's a large gender gap in congressional Facebook posts about sexual misconduct**, *Feb 2018* (with Adam Hughes and Patrick Van Kessel)
- **After Las Vegas attack, Democrats in Congress were far more likely than Republicans to mention guns on Facebook**, *Oct 2017* (with Brad Jones, Dennis Quinn, Solomon Messing)
- **Highly ideological members of Congress have more Facebook followers than moderates do**, *Aug 2017* (with Adam Hughes)
Covered by: R-Blogger

Conferences and Invited Talks

- **2019**: APSA, AAPOR, ICA, IC2S2, World Bank, JP Morgan Chase Institute
- **2018**: APSA, APSA Computational Social Science Pre-Conference
- **2016**: Tobin Project

LANGUAGES AND SKILLS

- Programming: Python, R, SQL, Django, AWS, Docker, Spark, ElasticSearch
- Data Science: Machine Learning, Deep Learning, Machine Vision, Natural Language Processing
- Language English, Chinese, Japanese.