

Allison Morgan

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WEB & CV: <http://allisonmorgan.github.io>

SUMMARY

Computational social scientist seeking opportunities to use machine learning, causal inference, and social network analysis to study people and their organizations, measure equity, and generate actionable policies.

Skills: Statistics, machine learning, social network analysis, scientific communication, data visualization (D3, matplotlib, DataStudio), data engineering (SQL, GCP, Airflow), programming (Python, Go, R)

Awards: National Science Foundation Graduate Research Fellow, Published in PNAS & Science Advances

EMPLOYMENT

Twitter

Denver, CO

Data Scientist II

July 2021 - Present

- **Developer Personas & Migrations:** Constructed data-driven developer personas that are foundational to understanding satisfaction with internal tooling. Developed dashboards for migrations – inherently a technological and social problem setting – that surface the value of a migration and help prioritize work.

University of Colorado at Boulder

Boulder, CO

NSF Graduate Research Fellow, Computer Science Department

August 2016 - May 2021

- **Automatically Assembling a Full Census of an Academic Field:** Developed web crawler for collecting longitudinal data on faculty hiring to understand the complex interactions between faculty hiring and observed patterns of inequality. [[Publication](#), Presented at IC2S2 2018 & PAA 2018 Workshop]
- **Modeling the Spread of Research Ideas:** Tested causal hypothesis – faculty hiring acts as a conduit for ideas spreading – using numerical simulations, and investigated the tradeoff of quality and network influence. [[Publication](#), [Press](#), Presented at IC2S2 2018, NetSci 2017, Society for Young Network Scientists (SYNS) 2019]
- **Measuring the Impact of Parenthood on Academic Careers:** Used difference-in-differences to measure researchers' productivity around parenthood. Open sourced parental leave policies at universities in the US & Canada. [[Publication](#), [Post](#), [Press](#), Presented at IC2S2 2019, Women in Network Science (WiNS) 2021]
- **Diversity of Academic Publishing Trajectories:** Showed using linear regression that a small fraction of researchers follow the average productivity trend – a rapid rise and then gradual decline. [[Publication](#)]
- **Quantifying the Socioeconomic Roots of Faculty:** Conducted a large representative survey of faculty and used census demographic data to highlight their privileged upbringings. [[Press](#)]

New York Times

New York, NY

Data Science Intern

Summer 2019

- **Fairness & Word Embeddings:** Worked with interdisciplinary stakeholders to review several standard algorithmic fairness criteria. Using three different algorithms, evaluated custom versus pre-trained word embeddings within an existing data science project.

Lytics (marketing technology start-up)

Portland, OR

Data Scientist

August 2014 - June 2016

- **Applied Machine Learning:** Developed package for anomaly detection in marketing trends, written in Go. [[Code](#), [Post](#)]. Implemented open source software for a naive Bayesian classifier in Go. [[Code](#), [Post](#)]

EDUCATION

University of Colorado at Boulder

Boulder, CO

Doctor of Philosophy in Computer Science

August 2016 - May 2021

- **Coursework:** Network Analysis & Modeling, Machine Learning, Information Visualization, Natural Language Processing, Software Engineering, Statistical Methods & Modeling, Causal Inference

Reed College

Portland, OR

Bachelor of Arts in Physics; Academic Commendations 2012–2014

August 2010 - May 2014