Stephanie Buongiorno (available to work in person)
Website: https://stephbuon.github.io/

Skills

- 5 years experience collecting, processing, and modeling large amounts of data (up to ~200 GB) using Python, R, SQL, Shell, and Git.
- 4 years of leadership experience on multidisciplinary research teams (domestic and international), giving talks to technical and non-technical audiences, and directing student work.
- 4 years of experience creating new documents for grant-funded research.

Recent Professional Experience

Technical Lead at the Human Trafficking Project   2022-23
Congressional Funding Bill (H.R. 2471), Southern Methodist University

- I am addressing a human rights issue in collaboration with academic researchers from four university departments and in conversation with members of Congress.
- I lead the development of an ethical, human-in-the-loop AI system to improve predictive named entity recognition.
- I am augmenting a graph database to improve analysis on topics like inequality.
- I perform various leadership roles including: a) creating new documents (e.g. data sharing agreements), b) hiring, and c) training researchers.

Teaching Fellow at Foundations and Applications of Humanities Analytics   2022-23
National Endowment of the Humanities (NEH) Grant (no. HT-272418-20), Santa Fe Institute

- I plan, teach, and evaluate workshops on text mining and data analytics for humanities data.
- I foster an inclusive and intellectually rigorous classroom for researchers with diverse backgrounds, from senior faculty to early career graduate students.

Technical Lead for Global Urbanization and Housing Affordability: Poverty, Property and the City   2018-21
National Science Foundation (NSF) Grant (no. 1520103), Southern Methodist University

- I developed the first app that applies advanced natural language processing techniques to the c19 British Parliamentary debates for research in DH. I used frameworks like gensim and spaCy.
- I developed an information extraction method in Python and R (for analyzing subject-object relationships) which has ~20% higher precision and recall than existing methods.
- I stored and processed data sets of 100-200 years of historical data in the form of tables, matrices, and n-grams for time-series analysis. I ran language models locally and on a Unix supercomputer.
- I hired, trained, and managed a team of 3-6 undergraduates from CS, public policy, and history to create a system for disambiguating speakers in 100 years of historical data.

Research Assistant for "Toward a History of the Associative-Developmental State"   2021-22

- I hired and collaborated with an ArcGIS specialist to make historical maps of New York and its labor movements over time. I geocoded and mapped addresses using geopandas, geopy, and folium.

Research Assistant for "A History of Early and Modern China"   2021

- I stored and processed csv data for time series analysis. I topic modeled debates from Hong Kong's legislative council to show change throughout the 20th-century.

Education
PhD, ABD, Applied Science in Engineering, Southern Methodist University   Expected 2023