

Alexander Spangher

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Objective: Language modeling and Creative Planning to support human inquiry.

EDUCATION **U. of Southern California**, Ph.D. Candidate, Computer Science *2019-present*
Columbia University, M.S. Data Science, M.S. Journalism *2014-2018*
Columbia University, B.S. in Neuroscience, B.S. in C.S. *2010-2014*

RELEVANT PROFESSIONAL EXPERIENCE **Carnegie Mellon University**, *Research Assistant* *2018-2019*
Knowledge Graph Construction for NASA Earth Sciences. Text-modeling using hierarchical topic modeling. Visualization/tooling in D3.js.

Microsoft Research, *Research Intern* *Summer 2018*
Large-scale analysis of user-behavior changes in response to Russian Internet Research Agency propaganda. Crowdsourcing, causal modeling, and data analysis.

New York Times, *Data Scientist* *2014- 2018*
Project Feels: Modeled emotions in articles. Data collection: Crowd-sourcing and active learning. Modeling: Deep learning and ensemble methods. Deployment: Google Cloud Services (GKE, Datastore, BigQuery). See: <https://nyti.ms/2nZCFEt>.
Collaborative Topic Model: Article recommendation-engine, scaled to all users. Modeling: Custom-designed Bayesian extension of LDA. Collab: Dr. David Blei. Deployment: MySQL, WSGI API, Luigi data pipelines. Extensions: multi-armed bandit and contextual bandit algorithms. See: <https://nyti.ms/2ngdYmX>

PEER-REVIEWED PUBLICATIONS (*Sample*)

🏆 indicates paper received an award.
📌 indicates paper was selected for an oral presentation.

🏆 📌 **A. Spangher**, N. Peng, S. Gehrmann, M. Dredze. “Do LLMs Plan Like Humans? Comparing Journalist Coverage of Press Releases with LLMs”, *EMNLP 2024*

🏆 **A. Spangher**, G. Sanchez, H. Fan, E. Levi, S. Biderman et. al. ”Stay on Topic with Classifier-Free Guidance.” *ICML 2024*

🏆 📌 **A. Spangher**, J. Youn, J. May, N. Peng. First Steps Towards a Source Recommendation Engine: Investigating How Sources Are Used in News Articles. *Computation + Journalism*. 2023.

A. Spangher, X. Hua, Y. Ming, N. Peng ”Sequentially Controlled Text Generation” *EMNLP 2022*

🏆 **A. Spangher**, X. Ren, J. May, N. Peng. ”NewsEdits: A News Article Revision Dataset and a Novel Document-Level Reasoning Challenge.” *NAACL*. 2022

📌 **A. Spangher**, G. Ranade, B. Nushi, A. Fourney, E. Horvitz. Characterizing Search-Engine Traffic to IRA Web Properties. *WWW*, 2020

A Spangher, Berk Ustin. Actionable Recourse in Linear Classification. *FAT 2018*.

LEADERSHIP and ACADEMIC HONORS

Honors: *USC:* 4 year Bloomberg Fellowship, over \$400,000. Annenberg Fellowship, \$100,000. *Columbia University:* John Jay Scholar and Dean’s List.

New York Times Diversity: *Co-chair and Founder:* NYT Young Professionals. *Contributor:* Unpublished Black History: <https://nyti.ms/2KvaGDM>

Professional Musician: Double Bassist for critically-acclaimed off-Broadway play.

MEDIA MENTIONS

Wired. <https://www.wired.com/story/what-does-a-fair-algorithm-look-like/>
BuzzFeed. <https://www.buzzfeednews.com/article/peteraldhous/russia-online-troll-viral-strategy>