

# NLP at Georgia Tech

Subash Chebolu and Jacob Hoylman



# Revalent people

Faculty: Jacob Eisenstein



PhD Students: Yi Yang, Umashanthi Pavalanathan, Sandeep Soni, Ian Stewart, and Yuval Pinter

# Jacob Eisenstein

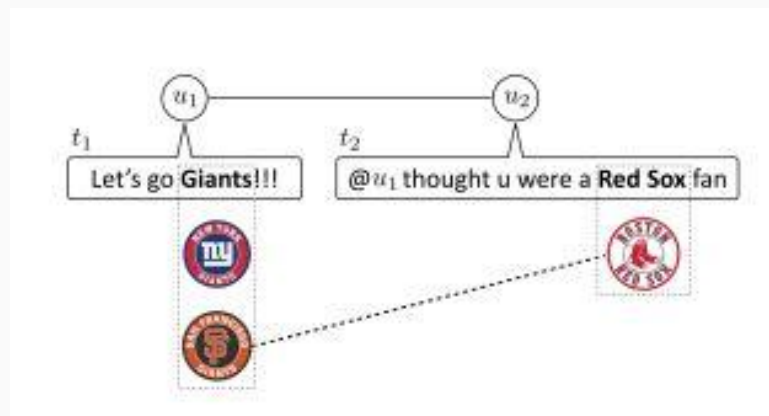
- Focuses on non-standard language, discourse, computational social science, and statistical machine learning
- Has 92 publications from 1999 - present day
- Leads the computational Linguistics laboratory at Georgia Tech
- Assistant Professor in the School of Interactive Computing at Georgia Tech
- Teaches Natural Language Processing, Computational Journalism, and Computational Social Science classes

# Recent Papers

- Y. Yang, M.-W. Chang, and J. Eisenstein. Toward socially-infused information extraction: Embedding authors, mentions, and entities. In *Proceedings of Empirical Methods for Natural Language Processing (EMNLP)*, November 2016.
- V. Krishnan and J. Eisenstein. “You’re Mr. Lebowski, I’m The Dude”: Inducing address term formality in signed social networks. In *NAACL*, 2015.
- R. Goel, S. Soni, N. Goyal, J. Paparrizos, H. Wallach, F. Diaz, and J. Eisenstein. The social dynamics of language change in online networks. In *The International Conference on Social Informatics (SocInfo)*, November 2016

# Socially Infused Information Extraction (2016)

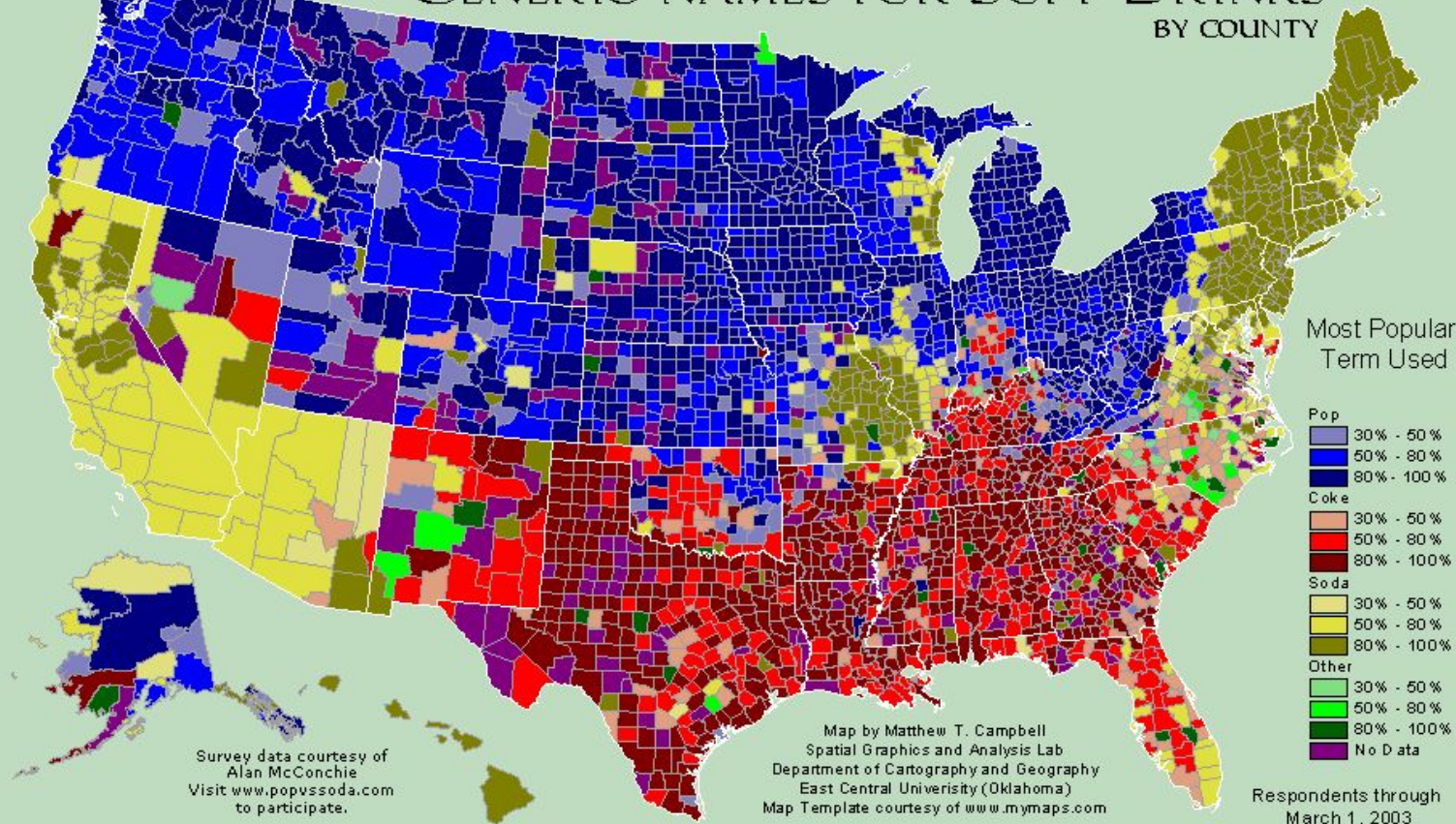
- Discerning what entity is being referred to using context
- Retweets, Mentions, Followers
- Eliminate ambiguity in identification



# Language change in Online Networks

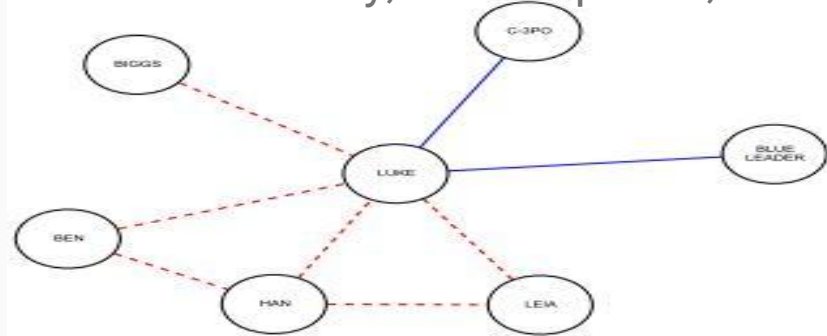
- Much of language change is brought through social media
- Exposure and influence are critical for new language to spread
- Phonetic spellings and abbreviations spread mostly through exposure
- Social structures can be discerned through the spread of language
- Geographically local ties aren't very effective conduits for language change

# GENERIC NAMES FOR SOFT DRINKS BY COUNTY



# Address Term Formality (2015)

- Names, titles, and placeholders
- How do these terms indicate formality of a relationship?
- For example, Sir => First name and First + Last name => dude
- Creating signed networks with information about formality, relative power, etc.





Questions?