

Gendered Job Postings

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Motivation and Data

Questions Explored

- What percentage have gender pronouns in the job posting?
- How are gendered job postings distributed across the USA?
- What are the most common roles in tech that have gendered job postings?
- Out of the gendered words/phrases, which are the most common?
- Find the correlation between phrase usage and location (are certain phrases being used more based on the origin of the company/where posting is coming from)

Data: ~21k Tech Industry Job Postings

- Glassdoor, Dice, Indeed, Monster

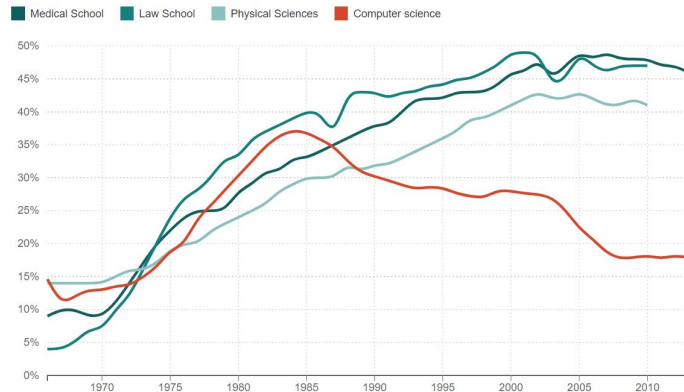
Evidence That Gendered Wording in Job Advertisements Exists and Sustains Gender Inequality

Danielle Gaucher and Justin Friesen
University of Waterloo

Aaron C. Kay
Duke University

What Happened To Women In Computer Science?

% Of Women Majors, By Field



Source: National Science Foundation, American Bar Association, American Association of Medical Colleges
Credit: Quoc Trung Bui/NPR





Approach



Web Scraping
(Selenium + BeautifulSoup)



Data Cleaning
(PySpark)



Data Analysis
(Pandas + NLTK)



Data
Visualization
(Jupyter
Notebooks)





Visualizations and Results

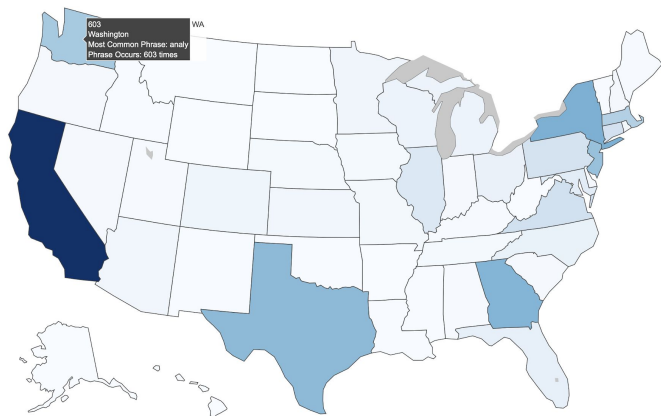
- Wrote an algorithm that found all the jobs that had descriptions that used words/phrases from our list
- Used NLTK to retrieve any stems from our master list of phrases and searched for those stems in the job descriptions
- We wanted to derive the stems from the job descriptions as well to determine which ones appear most by state without any main list restricting us
 - Instead of using our master list, we generate our own and determine if the word was masculine or not



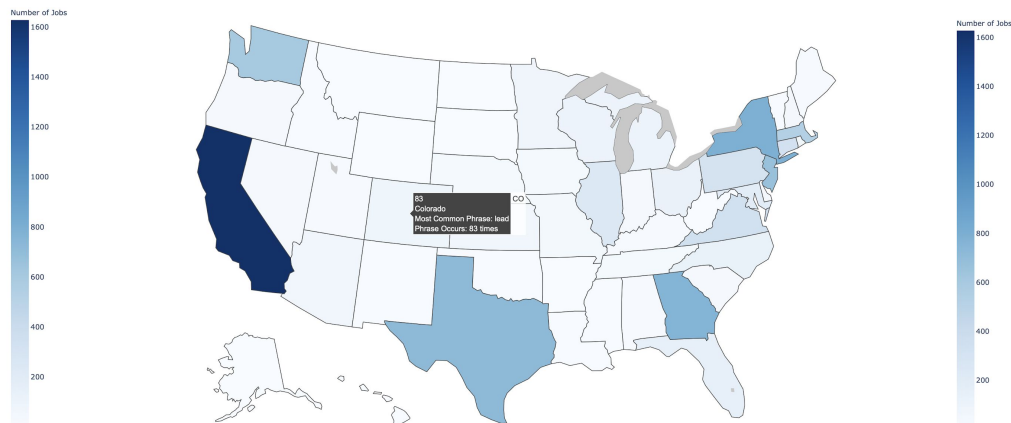


Visualizations and Results (Continued)

Number of Jobs that use most common word

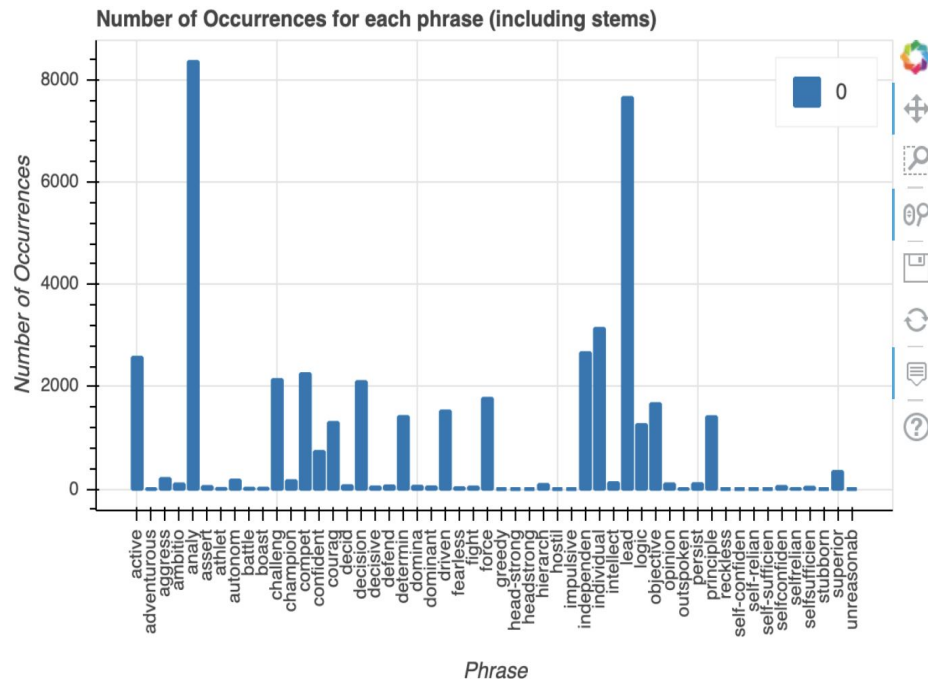
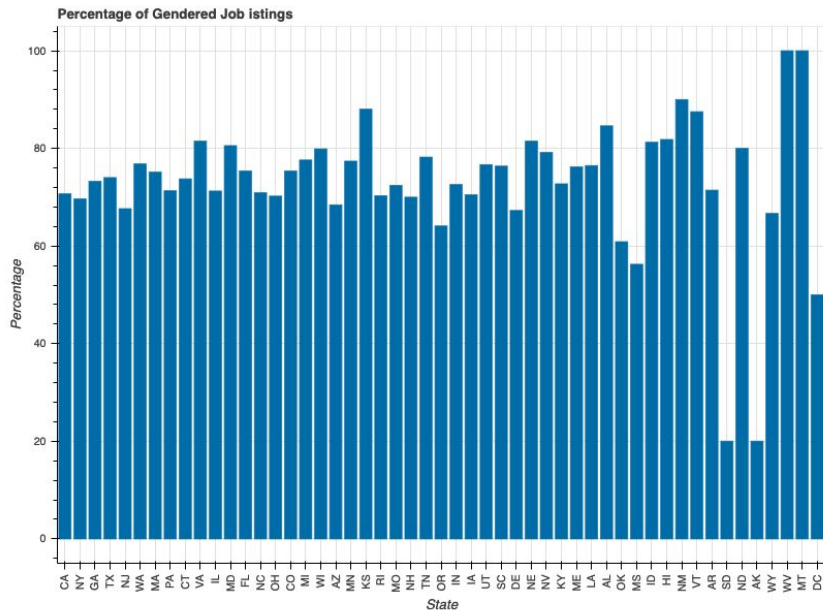


Number of Jobs that use most common word



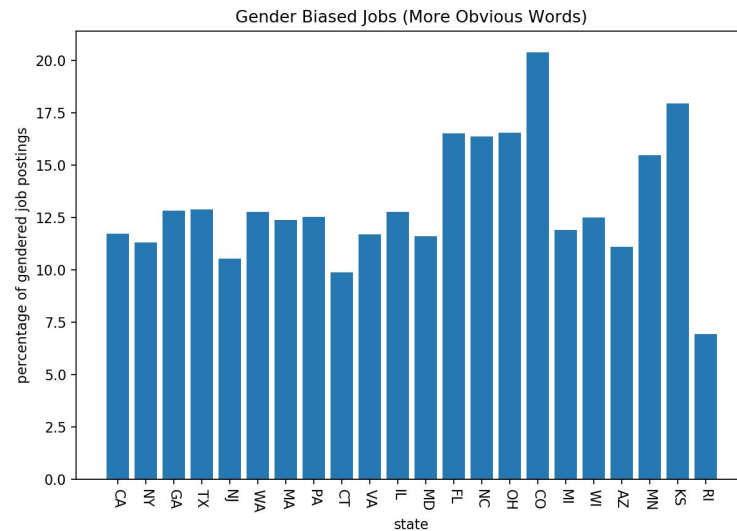
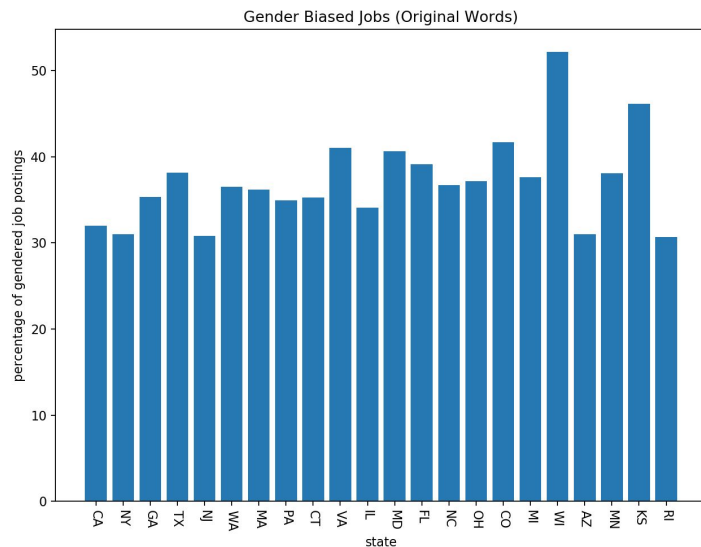


Visualizations and Results (Continued)





Visualizations and Results (Continued)





Q&A

