Using Data To Change Public Policy

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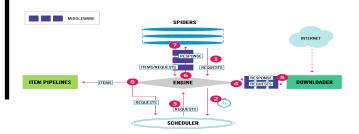
Machine Learning Algorithms

- Work with Heifer International
- Heifer raises money by sending catalogs to prospective donors, including individuals, families, funds, schools, organizations, and more.
- My job was to take the data collected by Heifer and find what catalogs optimized donations from each demographic (i.e., schools, families).

Traditional Software Development Input Data Computer Program Code Machine Learning Programming Input Data Computer Program Code Output Program Code

Web Scraping

- Worked in tandem with Teach For America to find what grants given to prospective teachers lead to the best returns
- Returns are measured in the length of the teacher's tenure at the school
- Needed to find what subjects had done during a specific period, specifically if they had taken part in education in some form, but this was projected to take months
- I programed an automated web scraper, specifically, the first academic LinkedIn web scraper
- Used a combination of scrapy, selenium, and graph theory methodology to create scraper



Incentivized Resumé Ratings

- An empirical model to evaluate employer preferences and find and measure potential discrimination
- Employers assess resumes they are fabricated to be matched with real job candidates, therefore maintaining incentives while bypassing the deception necessary in audit studies
- Worked with Qualtrics and Java to revamp old IRR trial and publish revamped model.
- Included new variables such as internships canceled during Covid-19 to find pandemic's effect on hiring market amongst different demographics.

