

Automating the Ranking of Article Visibility through Crowdsourcing
Trustworthiness
(Technical Report)

The Competition for Automation in News Media
(STS Research Paper)

An Undergraduate Thesis Portfolio
Presented to the Faculty of the
School of Engineering and Applied Science
In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science in Major

by

Christine Baca

date submitted, in May 8, 2021

Preface

With machine learning (ML), engineers can apply artificial intelligence to communications media, introducing new advantages and new hazards.

Social media fosters confirmation bias that encourages the spread of disinformation. We propose a system that uses crowdsourced trustworthiness to give users a news feed of diverse articles/headlines to discourage the formation of echo chambers. We will address the question: in what ways can news distributors engineer machine learning applications and user interfaces to decrease the propagation of disinformation? Our findings will include evaluations of our proposed project's topic variance, media diversity, and the effectiveness of a news-shuffling button and compare user and fact-checker trustworthiness scores.

How are journalists responding to efforts to automate aspects of journalism? Media companies, news organizations, journalists, tech companies, and readers promote, resist or otherwise influence applications of ML in news media. Many professional journalists recognize automated journalism as a useful supplement with problematic implications that must be prevented from displacing humans from important news stories. Large newspaper, tech giant, and start-up executives see automation as an incredibly useful way to increase economic and cultural capital in the already highly competitive business of journalism. Future works could investigate to what extent can the misuse of automated journalism exhibit algorithmic bias and indirectly contribute to echo chambers and news polarization.

List of Contents

1. Technical Report: Automating the Ranking of Article Visibility through Crowdsourced Trustworthiness
2. Sociotechnical Research Paper: The Competition for Automation in News Media
3. Prospectus