UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Hatred is in the Eye of the Annotator: Hate Speech Classifiers Learn Human-LikeSocial Stereotypes

Permalink

https://escholarship.org/uc/item/01j5v3mm

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

Authors

Davani, Aida Mostafazadeh Atari, Mohammad Kennedy, Brendan et al.

Publication Date

2020

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

Hatred is in the Eye of the Annotator: Hate Speech Classifiers Learn Human-Like Social Stereotypes

Aida Mostafazadeh Davani

University of Southern California, Los Angeles, California, United States

Mohammad Atari

University of Southern California, Los Angeles, California, United States

Brendan Kennedy

University of Southern California, Los Angeles, California, United States

Shreya Havaldar

University of Southern California, Los Angeles, California, United States

Morteza Dehghani

University of Southern California, Los Angeles, California, United States

Abstract

Social stereotypes impact individuals' judgement about different social groups. One area where such stereotyping has a critical impact is in hate speech detection, in which human annotations of text are used to train machine learning models. Such models are likely to be biased in the same ways that humans are biased in their judgments of social groups. In this research, we investigate the effect of stereotypes of social groups on the performance of expert annotators in a large corpus of annotated hate speech. We also examine the effect of these stereotypes on unintended bias of hate speech classifiers. To this end, we show how language-encoded stereotypes, associated with social groups, lead to disagreements in identifying hate speech. Lastly, we analyze how inconsistencies in annotations propagate to a supervised classifier when human-generated labels are used to train a hate speech detection model.