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CS-370-H5862 Current/Emerging Trends in CS

3-1 Discussion: Hidden Bias in AI

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Discussion: Hidden Bias in AI

* Provide 1–2 current examples of hidden bias encountered in popular applications.
* Define some of the industry efforts to reduce bias (such as responsible research and innovation [RRI], ethics by design, and right to be forgotten).
* How can you apply some of these principles to reduce hidden bias in the applications you described? How do these relate to the efforts currently underway?

As innovative as current tech companies are using Ai they are not without their short comings. With companies like Facebook using Ai take the texts in peoples posts to direct them to related video content, deep learning based on a user’s interests to target advertising, or facial recognition used to identify facial features from photos and live feeds there exists opportunities for ethical shortcomings. (Marr, 2016) By using targeted advertising in conjunction with other applied Ai Facebook runs into an issue with hidden bias by targeting potentially racially insensitive adverting or potential misinformation. By feeding into a person’s nature to see a confirmation bias this can create a dangerous environment of hurtful misinformation. Companies like Amazon aren’t exempt from hidden bias either. By testing Ai to review resume’s Amazon, the Ai discriminated against Women and people who had attended a women’s college as the historical resumes it used to learn from were primarily submitted by men. Thankfully this Bias Ai was caught and scrapped before being put into use to screen candidates. (Heilweil, 2020)

Facebook currently uses Ai to detect against misinformation. By using Ai in targeted advertising Facebook tries to keep information relevant to a user, for example if ten of your friends view an article or product Facebook may recommend this page to you based off your shared similar interests. Though this can create an Echo Chamber with examples such as an article claiming that Pope Francis came out in favor of Trump’s election in 2016. (Tardif, 2020) This misinformation is combated by user reports in conjunction with an Ai that’s focused to detect offensive, violent, and graphic images posted public. Though this Ai hasn’t come without its own ethical concerns with the team that oversees the content reviewed by the Ai and reported by users suffering from a medley of psychological effects from being exposed to disturbing content. (McGreevy, 2019)

By applying responsible research and innovation, ethics by design, and right to be forgotten companies like Facebook and Amazon can avoid some of the problems they encounter with ethics. By ensuring that companies promote inclusivity in their design, research, and innovation they can ensure the products they service, and support are ethically sound. After all, how can someone interact and support a company they’re unable to relate with. With lawsuits and a troubled past with the right to be forgotten Facebook now promotes and supports the removal of private information after being targeted by lawsuits such as the various facial recognition lawsuits found not in their favor. (Hatmaker, 2021)

# References

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**Responses:**

* **In your responses to your peers, evaluate their proposed solutions to reduce bias and propose alternatives. Remember to respond to at least two of your peers. Be sure to include cited sources to support your points.**

1. I agree, Ai doesn’t have the ability to say this is ethically not right. Ai can provide you with positive and false responses, but it cannot tell you why something is ethically not right. Or as you state, “The only information it has to interpret is what it was given”. Your solution can be helpful by casting a bigger net to the test data covers the widest possible array of information, but companies typically are looking to save time and a bigger net means more tests cases.
2. Hi Joe! Important to an Ai is the test data it uses to learn from, though not ethically sourcing that data can cause issues such as UK Police using Ai to attempt to predict crimes before they happen. Like a minority report situation, the information used to may have accidentally profiled low-income neighborhoods. (Baraniuk, 2018)

# References

Baraniuk, C. (2018, November 18). *newscientist.com*. Retrieved from Exclusive: UK police wants AI to stop violent crime before it happens: https://www.newscientist.com/article/2186512-exclusive-uk-police-wants-ai-to-stop-violent-crime-before-it-happens/#:~:text=Police%20in%20the%20UK%20want%20to%20predict%20serious,such%20as%20counselling%2C%20to%20avert%20potential%20criminal%20behaviour.