**Research Summary**

With the development of technology over time, there has been an increase of AI used in newly created systems, applications, and products. As this AI is still new, people are still learning how to properly implement it into their systems. Some of these systems and advertise themselves as helpful, accurate, and but in practice they don’t prove to be so as there is an impact of bias within. Imagine you go to one of these products in search of guidance or recommendations and have it deceive you or unknowingly have one of these systems disapprove your work due to its bias. How did it get this bias and why did it affect you? How do we prevent this bias and is there a better way to use AI in new technology?

First of all, how does AI get its bias. Fundamentally it gets bias from a variety of different sources, but each source has a common theme, lack of diversity. This can appear in the data set used by the AI, diversity within the team of programmers or lack of exposure to diverse cultures from a creator, or bias created algorithmically by the AI itself. AI doesn’t think with emotion or have its own opinion, it uses answers pooled from a large piece of data to create its responses. With this, if the data doesn’t properly represent diversity amongst its topic, then the AI will create a bias. For example, Amazon used AI to scan resumes from people applying for an engineering position. In reality this profession is predominantly male therefore most of the data the AI utilized to choose what resumes were best was skewed towards men. This led to the AI creating a bias and an application from a woman being denied despite the resume being sufficient. With that being said, this leads to the question why it would affect you. At its core it depends on your culture, ethnicity, or gender and how the AI generated its response. Now that its clear how the bias is creating, how can you go about preventing it.

In order to effectively prevent bias, you must revisit what’s been mentioned earlier, ensure there is diversity amongst very element involving the AI. For example, if the team of programmers consisted of both genders, multiple cultures, and different heritages then that creates for the best product that includes good diversity at its core. The team is only half of the answer, the same is to be said about the data set the AI uses. Say a team was tasked in creating a mental health app. People from across the world could potentially use this product therefore you must account for all the possible users. If the AI was to scan a face in attempt to detect emotion or thoughts, then it must scan people’s face of different shapes and colors with different approaches. Therefore, a different algorithm must be used depending on the person involved. This is because for example, a white Canadian face does not have the same features as someone from South Africa. A different method needs to be applied as outcomes would result in being inaccurate.

In conclusion, AI can have bias implemented and grown into its algorithms. This bias can be created from a lack or diversity in the data set or stemming from the team of programmers itself as they can lack diversity and heritage. These biases can affect any users that use the application the AI operates and can create inaccurate results. Overall, AI can be used very well and affectively as long as the proper measurements are taken into consideration and most importantly that diversity is included within the AI and the data set it uses.

**Works Cited**

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