

Principles: Fairness and non-discrimination, Privacy, Transparency and explainability, Responsibility and accountability, Awareness and literacy

Values: Ensuring diversity and inclusiveness

Stakeholders: Academia, Technical community

Algorithmic Racial Bias Starts in the Technical Community

Diversity is extremely important in Artificial Intelligence, not just in its data sets but also in its researchers.

An MIT media lab researcher found that face-analyzing AI worked better for white faces than for black ones.

The researcher decided to test the face-analyzing systems by inputting her own database that she had created using headshots of hundreds of world leaders, including individuals from many African countries with dark skin. As she proceeded to ask the AI to identify whether each headshot was of a man or a woman, a clear disparity began to present itself. The AI repeatedly misidentified black faces and had almost no difficulty identifying white ones.

The researcher concluded that majority of the global population are being remarkably under sampled and are being underrepresented within training data sets used to validate AI systems, like facial recognition technology. As a result of this study, IBM immediately reached out to the researcher and updated its software, improved its ability to recognize black women's faces by a factor of 10.

Unfortunately, this situation clearly illustrates that bias is everywhere and that AI is no less susceptible to racial than its human counterparts and that biased AI can perpetuate values such as racism and sexism.

- The technical community and academia should ensure that from the starting point of the development process, there are more diverse hires. This key finding in the scenario was identified by a black woman and testifies the need for more diversity in AI research. There needs to be more intersectional perspectives from diverse groups of minorities and women for AI to be more ethical in its considerations of most of the global population.

Fairness and non-discrimination, Ensuring diversity and inclusiveness, Respect and protection of human dignity, responsibility & accountability, privacy, transparency, awareness & literacy.

Know more about this case:

- "MIT Researcher: Artificial Intelligence has a Race Problem, and we need to fix it", Boston

Magazine, <https://www.bostonmagazine.com/news/2018/02/23/artificial-intelligence-race-dark-skin-bias/>

- “Racist Data? Human Bias is Infecting AI Development”, Towards Data Science, <https://towardsdatascience.com/racist-data-human-bias-is-infecting-ai-development-8110c1ec50c>
- “Rise of racist robots- how AI is learning all our worst impulses”, the Guardian, <https://www.theguardian.com/inequality/2017/aug/08/rise-of-the-racist-robots-how-a-i-is-learning-all-our-worst-impulses>

Additional resources:

- “Combatting Anti-blackness in the AI Community”, University of California-Berkley, https://www.devinguillory.com/files/AI_Anti_Blackness.pdf