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MI-462

September 10, 2023

DA-AI Ethics and Law Assignment

Algorithmic Discrimination	Protection from algorithmic discrimination starts during the design process. The design should include proactive equity assessment. Another step is to be using representative data. Along with that there should be protection against proxies for demographic features. To be fair and ensure accessibility for everyone, people with disabilities should be considered during the design and development process. Lastly independent evaluations plain language reporting should be conducted and made public whenever possible to confirm these protections.
Disability Bias/Discrimination	AI can lead to discrimination under the Americans with Disabilities Act and the Equal Employment Opportunity Commission is cracking down on it. Although most employees do not have a say in the hiring process, they are obligated to make sure their company is being fair. Employees/employers need to ask vendors their approach to accessibility first. There should be a warning sign if the vendor does not seem to have an approach. The questions being asked in the hiring process should also be monitored. If questions appear to prompt the relevance of a disability it should not be considered by the AI. As a whole we need to be more cogitative to loaded questions and the data we are feeding into the AI systems.
Unregulated AI Model	The European Union created an AI Act to govern the use of AI. The act will regulate AI models as there are 22 requirements to prevent bias, discriminative, and unsustainable models. I will not list all 22 requirements but will discuss the main two in my opinion. The first being data requirements. Now the data sources used in the training model must be described and made public. The data is also subject to data governance measures to check for suitability, bias, and appropriate mitigation. The second being

	model requirements that make the model creator disclose information. They must describe the capabilities, limitations, foreseeable risks, and justify any non-mitigated risks. There must also be benchmarks on the model based on public/industry standard benchmarks and report the results.
Machine Learning Bias	The most common way to mitigate model biases is to use representative data. These data sets tend to be larger, but machine learning does better with large datasets anyway. Another step to check fairness and no bias is to use benchmark datasets. This prevents the dataset from fading into the background until they break down. There is emphasis on explaining and documenting the differences in benchmarks. Another aspect that gets overlooked is the computer infrastructure. This is because of the use of abstractions in software libraries. To correct this issue the decisions by programmers must be justified and question unjustified assumptions regarding the infrastructure.
Cultural Pressures	Shared datasets are subject to cultural pressures and are evident when looking at the development of machine learning models. Mathematical culture focuses on tractable data problems like agreements rather than complicated data problems like external validity. There is also a hacker culture that results in moving fast and debugging as errors arise. This culture devalues the incremental and cooperative care required to create a high quality. Not all cultures have a negative impact on the dataset. Managerial culture encourages responsibility, shared documentation, and auditable processes.