**CIDM-6303 Ethics**

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CIDM-6303 – Ethics Assignment

* Rachel Thomas, the founding director of the Center for Applied Data Ethics at the University of San Francisco and co-founder of fast AI, discusses key issues related to ethics in technology.
* She highlights three critical cases: feedback loops in recommendation systems, the erroneous cutting of health benefits due to software bugs, and biased advertising algorithms.
* Rachel Thomas emphasizes the importance of accountability, recourse, and the potential for unintended consequences in the use of technology.
* She also addresses the challenges associated with relying heavily on metrics, emphasizing the need to consider the broader impact of technology on society and to be mindful of potential manipulations and biases.
* Thomas advocates for a more ethical approach in the development and implementation of technology, encouraging technology professionals to be aware of the potential societal impact of their work and to actively work towards minimizing harm.
* There is an impact of bias in machine learning, focusing on its amplification by algorithms.
* Examples include biased facial recognition and the COMPAS recidivism algorithm.
* Of the various biases there is: representation, historical, and measurement.
* Challenges in addressing bias include tech platforms unintentionally promoting disinformation and prioritizing speed over ethics.
* Ethical implications, especially regarding disinformation and global AI ethics is also a large portion of the issue.
* The complexity of addressing intentional or unintentional bias in algorithms is acknowledged, stressing interdisciplinary collaboration.
* There are questions addressing ethical concerns, even in seemingly justified incremental steps.
* There is a major importance in understanding and addressing algorithmic bias. With an emphasis on the need for safeguards against misuse and unintended consequences in machine learning development and deployment.
* There are various aspects of ethical considerations in technology, focusing on real-world case studies.
* There are potential downsides of certain case studies/research. Such as efforts to identify the ethnicity or sexuality of individuals, emphasizing the harmful consequences and ethical concerns.
* AI has a high probability of having disinformation campaigns, with examples of orchestrated manipulation and the challenges of combating such misinformation.
* The importance of interdisciplinary collaboration, ethical frameworks, and critical thinking in addressing bias and ethical concerns in machine learning is also important and must be a foundation to keeping machine learning in-check.
* Ethics must be looked through various lenses, including the rights approach, justice approach, utilitarian approach, common good approach, and virtue approach.
* The Markkula Center's set of deontological and consequentialist questions are presented as valuable tools for teams to assess the ethical dimensions of their projects. These are all tools for evaluating the ethical implications of technology projects.
* The Markkula Center Ethics Toolkit includes:
  + Ethical Risk Sweeping - like pen testing but with regularly scheduled sweeps, emphasizing the importance of ongoing efforts to identify ethical risks.
  + Expanding the Ethical Circle - encourages organizations to consult a diverse range of stakeholders to ensure a comprehensive understanding of interests and potential impacts.
  + "Think About the Terrible People," – focuses on consideration of potential misuse or abuse of products and ways to mitigate such risks.
  + "Closing the Loop" – focuses on continuous ethical feedback and iteration in the development process.
* There are also diversity issues in the tech industry such as the underrepresentation of women and people of color with the inclusion of workplace discrimination.
* There is a need for both industry ethics and regulatory policies to address complex challenges, drawing parallels with historical successes in areas such as environmental protection and safety regulations in the automotive industry.
* The difficulty of these problems requires a thorough diagnosis of issues before proposing solutions, with an emphasis on the importance of understanding and addressing the downsides of technological advancements.