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DATA 512A

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Reflection 4

1. “How does this reading inform your understanding of human centered data science?”

In the article, “Toward human-centered algorithm design”, this reading informed my understanding of human centered data science by diving in to the thought process of the purpose of algorithms. Accuracy, speed, and computation resources are metrics agreed upon within algorithm designers to compare results, but there is so much more to an algorithm than just those ideas. There is a disconnect between human-centered algorithm design and humans and the theoretical approaches that this reading introduces is a phenomenon of characteristics that are unique upon different situations. Human centered data science revolves around humans in general rather than users, and there can be many ways that a problem can be approached and analyzed. Standardized metrics are difficult because there isn’t always a “one-size fits all” type measurement for every scenario.

2. Using no more than one sentence:

a. “What was the question that the author tried to answer or raise as important?”

- The question that the author was raising how is HCAD developing and what does it look like theoretically?

b. “What was the method used to address the question?”

- The author believes in introducing considerations/theoretical scenarios in which he believes is important in implementing as a form of HCAD practice.

c. “What was the primary or most important point of the reading?”

- The paper addresses strategies to address misalignments or disconnects between algorithms and their interpretations through theoretical approaches.

Ask at least 1 thoughtful question regarding the assigned reading and explain the thought process of coming up with the question.

When reading the article, a question that I began to develop in my head is - what strength can theories provide for productive development of HCAD practice? The paper addresses theories that the user can base general implication on and the reasoning behind tools such as Reflext. However, I'm curious as to how people can develop an understanding of how to apply these theories to their own contextual situations. This thought process was developed when seeing the image of Reflext showing preferences of contraception in health care vs. abortion. These webs can be interpretable in this scenario, but what differentiates what is interpretable for one person over another?

Explain or describe a connection between the two readings and support the connection.

This will probably take 2-5 sentences.

The second article given was the "Power to the People: The role of Humans in Interactive Machine Learning". This article is a more technical paper discussing different scenarios of machine learning with regards to image segmentation, music composition, etc. It is a paper that describes a scenario from the first paper discussing an example of user involved machine learning processes. These research concepts were designed with the thought of humans interacting with machine learning cases. In the case of the power to the people article, the sections examine how studying end users can challenge assumptions of traditional machine learning.