QUICKSCAN - CANVAS

Natural Language Processing

NAME: Natural Language Processing

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DATE: September 5, 2024 10:43 AM **DESCRIPTION OF TECHNOLOGY**

Natural language processing (NLP) is the ability of a computer program to understand human language as it is spoken and written -- referred to as natural language. It is a component of artificial intelligence (AI).

HUMAN VALUES

People could perhaps look into the results of the tool too much, or rather, dictate their actions too much based on the information the tool gives them.

The intent of the tool is to complement, rather than dictate.

TRANSPARENCY



The goal would be more so defined depending on who is using it. But in general, it would be fairly straight-forward on what the tool would provide.

It is up to the user to take what it gives and use it in whichever way they deem fit in relation to their goals.

IMPACT ON SOCIETY



Political polarisation in real life, and also on social media (twitter in my scope) is a problem because of the divisiveness it creates in society.

Solving this is in itself would be impossible for me, but maybe this tool can help someone to do things such as identifying echo chambers, or maybe help an analyst with their research, and hopefully promoting more fact-checking.

STAKEHOLDERS



- Researchers
- Government

SUSTAINABILITY



The tool would be run locally on the users computer. So it depends on what kind of computer (small notebook, huge desktop tower) they use.

It is mostly depending on the amount of data that is processed.

HATEFUL AND CRIMINAL ACTORS



It could be used to cherry pick results based on the analysis and use that to drive a narrative. Whether "good" or "bad".

I'm not sure about laws being broken but you could create a profile on someone specific and their tweet behaviour.

DATA



I am aware with some of the possible shortcomings. There's not a whole lot I can do except trying to keep the technology's underlying model fitted as well as I can with the data available

This will prove to be tricky with every tool that relies on data.

FUTURE



As more and more data is fitted to the model, researches for example can theoretically get even better results in terms of accuracy.

PRIVACY



The technology itself does NOT register personal data. However, the data being COULD have personal data based on what is being tweeted by the user.

Collect data? No. assemble personal data? Possibly.

INCLUSIVITY



Built in no, but the available data could have a political bias depending on sample size which could bring a bias to the results.

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QUICKSCAN - CANVAS - HELPSIDE

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HUMAN VALUES

How is the identity of the (intended) users affected by the technology?

To help you answer this question think about sub questions

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...

TRANSPARENCY



Is it explained to the users/stakeholders how the technology works and how the business model works?

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...

IMPACT ON SOCIETY



What is exactly the problem? Is it really a problem? Are vou sure?

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...

STAKEHOLDERS

Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by...

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.

SUSTAINABILITY



In what way is the direct and indirect energy use of this technology taken into account?

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?

HATEFUL AND CRIMINAL ACTORS



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/ identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...

DATA



Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete:
- Correlation and causation are tricky concepts;
- Data collections are often biased:...

FUTURE



What could possibly happen with this technology in the future?

Discuss this guickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?

PRIVACY



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

INCLUSIVITY



Does this technology have a built-in bias?

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....

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