



NAME: Ai lip reading model

DATE: July 10, 2025 2:51 AM

DESCRIPTION OF TECHNOLOGY

The model can predict what the person is saying by only looking at the lips of someone.




HUMAN VALUES


Lip-reading technology can affect the identity of users by potentially violating their privacy, causing bias and discrimination, or creating a sense of surveillance. To address these concerns, it's important to implement measures such as privacy policies, bias testing, and stakeholder input to ensure the technology is fair and beneficial for all users.

TRANSPARENCY


no not yet

IMPACT ON SOCIETY


Developing a lip-reading model raises ethical concerns, such as privacy, bias and discrimination, accuracy, and fairness. To mitigate risks, it is important to evaluate the training data, test the model rigorously, and seek input from experts and stakeholders.

STAKEHOLDERS


- Deaf or not good hearing people

SUSTAINABILITY


To minimize the environmental impact of a lip reading technology, it's important to optimize its direct energy use through energy-efficient hardware and software design, and reduce the carbon footprint of supporting facilities. Additionally, considering the entire life cycle of the technology, such as sustainable materials and responsible disposal, can help reduce its environmental impact.

HATEFUL AND CRIMINAL ACTORS


A lip-reading model could be misused for surveillance, fraud, harassment, or espionage. To prevent misuse, legal and ethical frameworks should be implemented to ensure the technology is used in lawful and ethical ways.

DATA


It's important to consider the potential shortcomings and pitfalls of data when developing a lip reading model, such as the quality and representativeness of the training data and the potential for bias. To address these issues, it's important to carefully curate and validate the training data, regularly test and validate the model, and consider ethical and privacy implications when working with personal data.

FUTURE

in the future it can lead that the lipreading models become so good, they can help people with not a good hearing real time. So that you have a programm who can automatically can lip sync what someone is saying and tells this to the person

PRIVACY

It captures visual data of a persons face

INCLUSIVITY

Yes, lip reading technology can have built-in biases if the training data is not diverse and representative. To address this, it's important to ensure diverse training data and evaluate the model's performance across different demographic groups.

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University of Applied Sciences






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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 like:


- 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 you 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 quickly 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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