Image Classification

I will use image classification to see if sea containers have been broken into or not.

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Context of use: Education
Level of education: Bachelor

Impact on society
What impact is expected from your technology?

This category is only partial filled.

What is exactly the problem? Is it really a problem? Are you sure?
The problem is that to much drugs are transported trough sea containers. If this solution works it will reduce the drugs that are transported, dealt on the streets and used. It also makes the harbor a safer place if there are less drugs there.

Are you sure that this technology is solving the RIGHT problem?
This question has not been answered yet.

How is this technology going to solve the problem?
This question has not been answered yet.

What negative effects do you expect from this technology?
This question has not been answered yet.

In what way is this technology contributing to a world you want to live in?
This question has not been answered yet.

Now that you have thought hard about the impact of this technology on society (by filling out the questions above), what improvements would you like to make to the technology? List them below.
This question has not been answered yet.

Hateful and criminal actors
What can bad actors do with your technology?

This category is only partial filled.

In which way can the technology be used to break the law or avoid the consequences of breaking the law?
The technology could be misused in ways that violate people's privacy, like secretly watching them without their knowledge or consent. It could also be used for criminal activities, like stealing or tricking people into giving away their personal information. And sadly, some might try to use it to cover up their wrongdoing by tampering with the surveillance system to hide evidence of their actions.

Can fakers, thieves or scammers abuse the technology?
This question has not been answered yet.

Can the technology be used against certain (ethnic) groups or (social) classes?
This question has not been answered yet.

In which way can bad actors use this technology to pit certain groups against each other? These groups can be, but are not constrained to, ethnic, social, political or religious groups.
This question has not been answered yet.

How could bad actors use this technology to subvert or attack the truth?
This question has not been answered yet.

Now that you have thought hard about how bad actors can impact this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Privacy

Are you considering the privacy & personal data of the users of your technology?

This category is only partial filled.

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

The only personal data that could be registered are faces of people at the docks. This could endanger them if a bad actor knows where and who they are.

Do you think the technology invades the privacy of the stakeholders? If yes, in what way?

This question has not been answered yet.

Is the technology is compliant with prevailing privacy and data protection law? Can you indicate why?

This question has not been answered yet.

Does the technology mitigate privacy and data protection risks/ concerns (privacy by design)? Please indicate how.

This question has not been answered yet.

In which way can you imagine a future impact of the collection of personal data?

This question has not been answered yet.

Now that you have thought hard about privacy and data protection, what improvements would you like to make? List them below.

This question has not been answered yet.

Human values
How does the technology affect your human values?

This category is only partial filled.

How is the identity of the (intended) users affected by the technology?
This fills the role of checking the containers from the outside if they have been broken into. (If this is a role already).

How does the technology influence the users' autonomy?
This question has not been answered yet.

What is the effect of the technology on the health and/or well-being of users?
This question has not been answered yet.

Now that you have thought hard about the impact of your technology on human values, what improvements would you like to make to the technology? List them below.
This question has not been answered yet.

Stakeholders
Have you considered all stakeholders?

This category is only partial filled.

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

Name of the stakeholder
Workers at the docks

How is this stakeholder affected?
-

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
The police

How is this stakeholder affected?
-

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Name of the stakeholder
Drug dealers

How is this stakeholder affected?
-

Did you consult the stakeholder?
No

Are you going to take this stakeholder into account?
No

Technology Impact Cycle Tool

Image Classification

Did you consider all stakeholders, even the ones that might not be a user or target group, but still might be of interest?
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Now that you have thought hard about all stakeholders, what improvements would you like to make? List them below.
This question has not been answered yet.

Data
Is data in your technology properly used?

This category is only partial filled.

Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into account in the technology?
Because I can't just find 100 broken into containers I know that the amount of data will be a shortcoming. This is bad if they take the results seriously from the start, but i will make sure the stakeholders know that it can't be 100% trusted from the start.

How does the technology organize continuous improvement when it comes to the use of data?
This question has not been answered yet.

How will the technology keep the insights that it identifies with data sustainable over time?
This question has not been answered yet.

In what way do you consider the fact that data is collected from the users?
This question has not been answered yet.

Now that you have thought hard about the impact of data on this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Inclusivity
Is your technology fair for everyone?

This category is only partial filled.

Will everyone have access to the technology?
This question has not been answered yet.

Does this technology have a built-in bias?
It will only tell a container is broken into or not. I will make sure that i make pictures of a wide range of containers and make sure the training data doesn't have any colors so it doesn't have any color bias.

Does this technology make automatic decisions and how do you account for them?
This question has not been answered yet.

Is everyone benefitting from the technology or only a a small group? Do you see this as a problem? Why/why not?
This question has not been answered yet.

Does the team that creates the technology represent the diversity of our society?
This question has not been answered yet.

Now that you have thought hard about the inclusivity of the technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Transparency
Are you transparent about how your technology works?

This category is only partial filled.

Is it explained to the users/stakeholders how the technology works and how the business model works?
Yes, I will tell them how my product will work because it is a simple concept. My AI system will tell them if a container is broken into or not with a camera. It will come to its conclusion by training on images of containers that are both broken into and not.

If the technology makes an (algorithmic) decision, is it explained to the users/stakeholders how the decision was reached?
This question has not been answered yet.

Is it possible to file a complaint or ask questions/get answers about this technology?
This question has not been answered yet.

Is the technology (company) clear about possible negative consequences or shortcomings of the technology?
This question has not been answered yet.

Now that you have thought hard about the transparency of this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Sustainability
Is your technology environmentally sustainable?

This category is only partial filled.

In what way is the direct and indirect energy use of this technology taken into account?
I will only need a camera and a device running the AI system. The device and the camera will only be turned on when people need to check a container, it will be turned off for the rest of the time.

Do you think alternative materials could have been considered in the technology?
This question has not been answered yet.

Do you think the lifespan of the technology is realistic?
This question has not been answered yet.

What is the hidden impact of the technology in the whole chain?
This question has not been answered yet.

Now that you have thought hard about the sustainability of this technology, what improvements would you like to make? List them below.
This question has not been answered yet.

Future
Did you consider future impact?

This category is only partial filled.

What could possibly happen with this technology in the future?
The docks of Rotterdam might not or be used less for drug transport. This means there are less drugs going trough or coming from the Netherlands, which will be a great thing. This also means the people at the docks will feel safer being there.

The worst that can happen is that this tool gets misused and all the drugs still go trough my system, which means there still will be lots of drugs that are used and transported trough NL.

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one utopian scenario.
This question has not been answered yet.

Sketch a or some future scenario (s) (20-50 years up front) regarding the technology with the help of storytelling. Start with at least one dystopian scenario.
This question has not been answered yet.

Would you like to live in one of this scenario's? Why? Why not?
This question has not been answered yet.

What happens if the technology (which you have thought of as ethically well-considered) is bought or taken over by another party?
This question has not been answered yet.

Impact Improvement: Now that you have thought hard about the future impact of the technology, what improvements would you like to make? List them below.
This question has not been answered yet.