ALGORITHMIC EQUITY TOOLKIT

Automated decision systems make mistakes, and the types of mistakes they make can put people with marginalized identities at increased risk. These technologies are not always necessary. Some systems may be too invasive or risky by design, which is enough reason to reject a system outright.

ACCURACY & ERROR IN ALGORITHMIC SYSTEMS

Some technologies used by governments are inaccurate. They don’t measure or detect what they claim to, or they do it poorly. This can result in decisions that adversely affect some individuals more than others. A single error in some contexts can result in a fatal or life-altering situation for a person from a historically marginalized community.

EXAMPLE—>

**Automated license plate readers** can misidentify letters and numbers on the plate or the state where the plate was issued.

EXAMPLE—>

**Facial recognition systems** are never completely accurate; photos of suspects can be incorrectly matched with mugshots in a police database and falsely identify a person.

A1:

How accurate is the system? How often and under what conditions does it make mistakes? Does it have settings to adjust for more precise predictions?

> What evidence is there that the accuracy of the system has been independently tested, besides the manufacturer’s claims?

> How will the system perform in the local context where it is being deployed? Systems should be checked for their real-world performance in the places they are used.

> How does the system perform when presented with diverse characteristics such as skin tone, lighting, signal interference, movement, or incomplete information?
A2:

What policies and procedures are in place when the system makes a mistake?

> How are users of the system trained to recognize and resolve errors?
> How do reporting processes publicly disclose errors when they occur?
> What mechanisms are in place for auditing outcomes?
> What is the role of community oversight in monitoring errors and outcomes?
> What penalties exist for harms resulting from inaccurate assessments?
> What protections are there for whistleblowers?


>B1:

Where does the data that the system is using come from? Who gathered that data, with what tools, and for what purposes?

> How has the data been audited to ensure it does not reflect discriminatory practices like racial profiling?
> Will the data be re-purposed from the original reason it was collected? If so, how?


>B2:

If the system works without errors, does it still perpetuate injustice?

> What say do community members have in how the system is implemented (including where and when the system is used)? Can community members object and have their objections heard?
> How can the public access and correct system records?
> What are the explicitly intended and allowable uses of the system?
> Are there oversight mechanisms in place to ensure the system is only being used for the specific purposes claimed? If so, what are they?
> Are there any disciplinary penalties for misuse of the system? If so, what are they?