

Research Topic Summary

Speaker Name: Ayanna Howard

Talk Title: Are we Trusting AI too much?

Your Name: Bojun Yang

Research Field/Problem:

Describe one (or more) of the research problems the speaker's work addresses.

Ayanna's studies all focused on cognitive bias. Her studies uses interactions with robots to create situations where a human's level of trust towards a robot can be observed.

Approach:

What is/are the novel approach(es) or innovative idea(s) behind the speaker's solution to the above?

From her first study, she finds that children and adults have different perceptions of trust. While children would say they trusted a robot trained to mimic human behavior, adults would say they do not trust the robot. However, the outcomes are the same in reference to influencing the participant's behavior.

In her 2nd study, she studies the perception of trust on a faulty robot. If the participant's first impression of the robot is that the robot is perfect, the participant will lose all trust when the robot fails later. However, if the participant's first impression of the robot is that it has faults, the participant has a source of reasoning on why the robot can fail.

In the 3rd study, results actually show that racial bias doesn't affect how humans perceive robots. In the end, robots are robots to humans. The implicit biases did not have significant effects on how humans treat racialized robots.

The 4th experiment studied human's emotional response to a robot giving advice. The studies show that people do not like to be interrupted if they are wrong and they have an emotional reaction when they are interrupted with information that they are wrong. This is important because this is important in designing systems to avoid that emotional reaction.

The last experiment took the emotional concept out by making the robot very non-human like. It tried to emphasize situational impact. The results showed that participants would trust the robot in all cases except when given a pro-notion that the robot has a history of failures.

Takeaways:

What key ideas or new insights did you learn from this talk?

I learned that we humans actually tend to trust robots a lot. This surprised me because with all the robot apocalypse media out there, I would think people would be less trusting of such technology. However, this trust can easily be lost when a seemingly perfect system failed. When such a failure occurred, individuals show an emotional response that leads to distrust of the

robot. I think these are all important considerations when designing robot systems that interact with humans.

Questions:

List any follow-up questions you have after watching this video.

I would like to see the result of an study where the trust a participant had in robots was compared to the trust they had in a stranger. This would be insightful for further studying the cognitive biases that humans have towards robots.