## **Credit Task 1.4: Al in Popular Culture**

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For this task, I chose Avengers: Age of Ultron (2015) as the primary media to discuss. The reason I chose this movie is that it portrays two artificial intelligence characters, J.A.R.V.I.S. and Ultron, which reflect different roles in society. The relationships between AI and human characters in Avengers: Age of Ultron are deep and show both fear and trust. Once activated, Ultron rejects human authority and rapidly turns hostile and independent. He has a hostile relationship with his creators, especially Bruce Banner and Tony Stark. Ultron considers himself superior and uses humanity's flaws as an excuse to wipe it out. This dynamic demonstrates an imbalance of power, as AI not only resists human control but also goes against its intended function.

On the other hand, Tony Stark's devoted helper, J.A.R.V.I.S., is a kind AI. He is rational, composed, and sympathetic to human concerns. In the end, he becomes part of Vision, an advanced AI with morals, consciousness, and a sense of direction. He serves as Stark's assistant, helping him with decision-making and technology control. The AI upholds moral principles and decides to defend mankind even after changing into Vision, proving that it shares human ideals like empathy, justice, and cooperation. This comparison shows how human design decisions, like objectives, limitations, and moral programming, can have a big impact on AI behavior.

Age of Ultron's depiction of AI has an important social influence because it reflects both fears and confidence around AI. Ultron represents the fear that comes with losing control of strong technologies. The public's concerns that AI could become dangerous if it is not developed ethically are reflected in its quick growth of sentience and rejection of human control. On the other hand, Vision (formerly J.A.R.V.I.S.) promotes the hope that AI will be able to live alongside and help people. With the right security measures, AI can develop into a responsible companion, according to its moral thinking and thoughtful nature. These contradictory representations affect public perception by highlighting the significance of transparent AI development, ethical AI development, and bringing AI systems into line with social norms and human values.

Although these depictions are convincing, they differ greatly from the powers, autonomy, and moral reasoning of actual AI technologies today. Artificial general intelligence (AGI), which is the capacity to understand, gain, and apply knowledge across a variety of fields at or above the human level, is demonstrated by Ultron in the movie (Goertzel, 2014). He quickly develops self-awareness, makes choices on his own, and plans tactics for dominating the world. Real-world AI, however, is still a long way from AGI. Today's

Al systems are narrow Al—made for certain tasks like image recognition, language translation, or recommendation systems (Russell & Norvig, 2021). They are not self-aware, conscious, or able to transfer knowledge between areas.

In the movie, J.A.R.V.I.S. is a highly intelligent virtual assistant that can reason, understand emotions, and integrate easily with complex systems. Even though modern assistants like ChatGPT, Alexa, and Siri can carry out conversational tasks, they lack emotional intelligence and real comprehension since they rely on massive language models (Bender et al., 2021). In contrast to J.A.R.V.I.S., they lack both agency and ethical awareness. The film's concern about AI in high-stakes situations is reflected in the growing integration of AI into military, surveillance, and healthcare systems (Sahoh & Choksuriwong, 2023). Concerns regarding AI alignment are also brought up in the movie; this is a real-world problem that researchers are working to resolve, making sure AI objectives align with human values (Gabriel, 2020).

The movie does a good job of highlighting the moral dilemma, dangers, and obligations related to AI research. While fictional depictions such as Ultron can cause anxiety, they also encourage public discussion about ethical and safe AI.

In conclusion, Age of Ultron captures important societal issues like loss of control, alignment, and AI ethics, even though it depicts AI with capabilities far beyond those of modern technology. The power of actual AI systems will make these conversations more important.

## References:

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