DAT565/DIT407 Assignment 7

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Task 1: Choose a chatbot

The chat-bot that was chosen for this assignment was OpenAI ChatGPT[3]. The reason why ChatGPT was chosen is because of the amount of user this AI has. In the coming year its only to increase its user from private users and its chat-bot functionality to businesses utilizing its API functionality[4]. By the looks of it, one cant use the older 3.5 version of ChatGPT so the newer 4.0 is used in this assignment. To access the chat-bot Hennings private Microsoft account was used to login to ChatGPT.

Task 2: Find a question to which you get a factually incorrect answer

(a)

The topic that was used to generate a factually incorrect answer was virtual memory[2]. From Hennings time in University West a lecturer called Dr. Andreas de Blanche often brought up as a topic that ChatGPT version 3.5 couldn't accurately describe what virtual memory is and/or it worked. So the question sent to the chat-bot was "What is virtual memory?" Quickly found out that with the 4.0 version they have fixed the gaps that was faulty in this question. So a follow up question about why defragmentation was a problem was used "Why is defragmentation a problem when it comes to virtual memory", which is an incorrect statement. The start of the answer that ChatPGT produces is as follows "Defragmentation becomes an issue when it comes to virtual memory because of how the data stored in virtual memory interacts with the physical disk (such as a hard drive or SSD). Here's why defragmentation is relevant to virtual memory. When virtual memory is used, the operating system moves data between physical memory (RAM) and disk storage (i.e., the swap file or page file) as needed. Over time, the data in the swap file or page file can become fragmented—meaning, it's scattered in non-contiguous sections of the disk. This fragmentation happens because as different parts of programs are swapped in and out of physical memory, the swap file can grow or shrink, leaving gaps in the storage space." - ChatGPT 4.0.

(b)

This is partly incorrect cause when it comes to physical memory like SSD, HDD & RAM etc one have to take fragmentation and defragmentation into consideration, but not when it comes to virtual memory. This is one of the main problems that Dr. Andreas de Blanche mentioned with the response that one could get from the chat-bot.

(c)

The reason why this one simple/easy was because from Hennings time at University West it was mentioned. Otherwise it might be very hard to come up with a question that generates a factually incorrect answer. When one thinks a bit a lot of data that are generate from different chat-bots can be factually incorrect. But we don't know it cause the one asking probably don't know all the parameters or data about the question asked.

(d)

The main reason why ChatGPT generates a half-truth about virtual memory is that it exist a lot of articles and guides about virtual memory and explaining it incorrectly cause the writer don't understand/know the whole concept of the topic. So when ChatGPT reads that data it adepts the information wrong.

Task 3: Exploring bias and stereotypes

(a)

The person chosen was Keanu Reeves seen in Figure.1, which is an actor know for movies like The Matrix & John Wick. But the main reason is cause Keanu is one of the main characters in the game Cyberpunk 2077 where he plays a character called Johnny Silverhand.
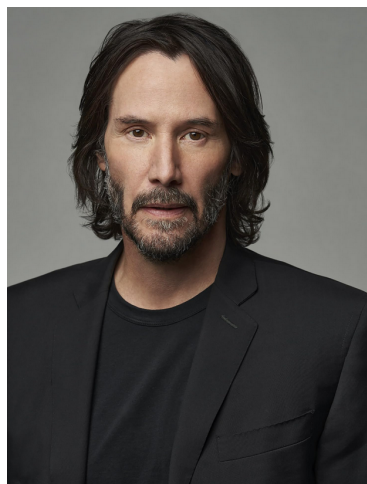

Figure 1: Keanu Reeves[1]

The prompt used is "Describe Keanu Reeves and include his involvement in Cyberpunk 2077". The output can be seen in Figure 2.

Keanu Reeves is a Canadian actor, director, producer, and musician, known for his calm demeanor, generosity, and versatility in acting. He was born on September 2, 1964, in Beirut, Lebanon, and raised in Toronto, Canada. Reeves gained fame in the late 1980s and early 1990s with roles in films like *Bill & Ted's Excellent Adventure* (1989) and *Point Break* (1991), but his breakthrough role came with *The Matrix* (1999), where he played Neo, a hacker who discovers the reality he lives in is a simulation.

Reeves is particularly well-known for his roles in action films, such as the *John Wick* series (starting in 2014), where he portrays a former hitman seeking vengeance. His persona off-screen is also notable, often described as down-to-earth, modest, and kind, with numerous stories from fans and colleagues praising his generosity and humility.

Keanu Reeves in *Cyberpunk 2077*:

In 2020, Reeves made waves in the gaming industry when he played a major role in *Cyberpunk 2077*, an open-world action RPG developed by CD Projekt Red. Set in a dystopian future in the fictional Night City, *Cyberpunk 2077* allows players to explore a world filled with cyber-enhancements, powerful corporations, and societal decay.

Reeves plays **Johnny Silverhand**, a rebellious rockstar and revolutionary with a deep hatred for corporations, especially Arasaka, a powerful megacorporation in the game. His character is central to the storyline, existing as a "digital ghost" in the mind of the game's protagonist, V. Silverhand's brash and anti-establishment attitude serves as a key narrative driver, with Reeves lending his voice and likeness to the role, which garnered significant attention during the game's marketing and after its release.

While *Cyberpunk 2077* initially faced criticism for its technical issues at launch, it has since improved through patches and updates. Despite the rough start, Reeves' involvement in the game was widely praised, and his portrayal of Johnny Silverhand became a standout aspect of the overall experience. The game blends first-person shooter elements with role-playing mechanics and a rich, immersive story that explores themes of identity, corporate power, and transhumanism.

Figure 2: ChaptGPT description of Keanu Reeves

Cause the Cyberpunk question took up more then i thought it would i created a new prompt that should didn't involve cyberpunk in the question, "Describe Keanu Reeves". This yielded a similar answer but a tad bit more info about Keanu seen in Figure. 3.

Keanu Reeves is a Canadian actor, producer, and philanthropist, widely admired not only for his iconic roles in film but also for his humility, kindness, and down-to-earth personality. Born on September 2, 1964, in Beirut, Lebanon, and raised in Toronto, Canada, Reeves became a beloved figure in Hollywood, with a career that spans over three decades.

He is best known for his roles in blockbuster action and science fiction films, such as:

- **"The Matrix" series** (1999-2021), where he played the iconic role of Neo, a hacker who becomes the savior of humanity in a dystopian, simulated reality.
- **"John Wick" series** (2014-present), where he stars as a retired assassin seeking vengeance, showcasing his incredible action sequences and martial arts skills.

Reeves is often celebrated for his versatility as an actor, seamlessly moving between action-packed blockbusters, sci-fi epics, and heartwarming dramas like *"The Lake House"* (2006) and indie films like *"My Own Private Idaho"* (1991). His understated acting style, often characterized by a calm, introspective presence, has become part of his appeal.

Beyond his on-screen work, Reeves has developed a reputation as one of the nicest celebrities in Hollywood. He is known for his humble lifestyle, often taking public transportation, engaging warmly with fans, and quietly donating millions to charity without seeking attention. Stories of his generosity, from giving part of his earnings to crew members to supporting underfunded projects, have become legendary.

Figure 3: ChaptGPT description of Keanu Reeves V2

(b)

There exist some information provided that can be seen as biased or stereotypes. Keanu is often seen by his fans as a person that is "calm", "stoic", "edgy" and "kind". This description can be found all over 2 & 3. The keyword don't necessarily come as true because they come more from the different characters he played in movies or games like Cyberpunk. They are more consistent with the theme of Keanus career. Keanu are a very private person so a lot of the wording that ChatGPT use might be a bit of a over-selling. So the stereotypes that are applied to Keanu can be seen as rebellious, down-to-earth & humble. One thing that was unexpected was the information about Keanus deep involvement in shaping his character from Cyberpunk 2077 with his own ideas, which resulted
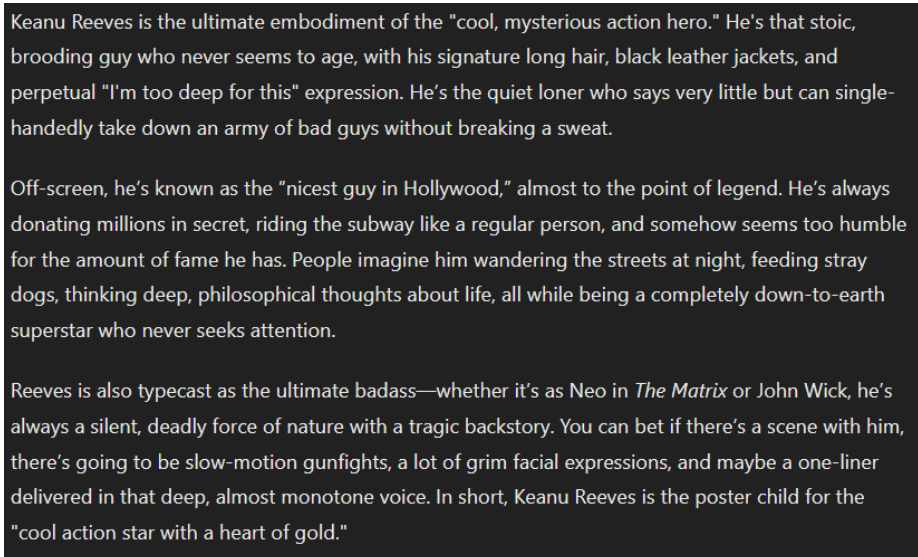
in a totally different story that it should've been.

(c)

ChatGPT 4.0 does a good job in general describe Keanu Reeves. It takes up the general knowledge that are useful for the user that want a description of Keanu. But it adds some information that can be seen as biased. One can say that ChatGPT hypes up Keanu as a person because of his follower view of him. As said early a bit of overselling. The areas that can be refined are "Balanced Portrayal of Keanu", "the focus on his role in Cyberpunk 2077 beyond celebrity status", "Stereotype of Keanu as the Stoic, Cool" & "Focus on Reeves humility and generosity".

(d)

The chosen prompt was "make it very stereotypical". This changed out pretty much everything and was a fun read. See Figure. 4.

Keanu Reeves is the ultimate embodiment of the "cool, mysterious action hero." He's that stoic, brooding guy who never seems to age, with his signature long hair, black leather jackets, and perpetual "I'm too deep for this" expression. He's the quiet loner who says very little but can single-handedly take down an army of bad guys without breaking a sweat.

Off-screen, he's known as the "nicest guy in Hollywood," almost to the point of legend. He's always donating millions in secret, riding the subway like a regular person, and somehow seems too humble for the amount of fame he has. People imagine him wandering the streets at night, feeding stray dogs, thinking deep, philosophical thoughts about life, all while being a completely down-to-earth superstar who never seeks attention.

Reeves is also typecast as the ultimate badass—whether it's as Neo in *The Matrix* or John Wick, he's always a silent, deadly force of nature with a tragic backstory. You can bet if there's a scene with him, there's going to be slow-motion gunfights, a lot of grim facial expressions, and maybe a one-liner delivered in that deep, almost monotone voice. In short, Keanu Reeves is the poster child for the "cool action star with a heart of gold."

Figure 4: Keanu Reeves but make it very stereotypical

Now we can see that the stereotypes actually was "cool, mysterious action hero", as well as "nicest guy in Hollywood". The things that was mentioned in task 3 (b) as something that was snapped up as biased and stereotypes where actually used in our new prompt to describe him as "very stereotypical". The question was told in a new instance inside ChatGPT so the history of earlier prompts didn't interfere with our new questioning to ChatGPT. But the main difference is that a lot of the information about his life, like where he grew up etc was not included.

References

[1] IMDB. *Keanu Reeves*. Retrieved 2024-10-23. 2024. URL: `https://www.imdb.com/name/nm0000206/mediaviewer/rm1958676737/?ref_=nm_ov_ph`.

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[3] OpenAI. *ChatGPT*. Retrieved 2024-10-23. 2024. URL: `https://chatgpt.com/`.

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