IMPORTANT INFORMATION
YOUR VOICE ASSISTANT MAY REPRODUCE GENDER
BIASES WHICH COULD POTENTIALLY BE HARMFUL
TO USERS.

Please read and keep all safety, security, and use instructions.

WHAT ARE GENDER BIASES?

Gender biases are attitudes or beliefs that a person holds about individuals based on their gender. These biases can be conscious or subconscious, and they can influence how a person thinks about, acts towards, and makes decisions concerning others. Gender biases can also be reflected in societal norms and expectations about gender roles and behaviours.

There are many ways in which gender biases can manifest, including through language, media, and technology. For example, certain occupations or activities may be seen as more appropriate or suitable for one gender, and individuals may be

judged or treated differently based on their gender. Gender biases can also lead to discrimination and inequality, as they can impact opportunities and resources available to individuals based on their gender.

It is important to recognise and challenge gender biases in order to promote equality and inclusivity.

WHAT KIND OF GENDER BIASES ARE TRANSMITTED THROUGH AI-POWERED SYSTEMS?

A) DEFAULT VOICES
Many voice assistants, such as Amazon's Alexa and Apple's Siri, are programmed to use female default voices. This can contribute to the reinforcement of gender stereotypes and sustain societal expectations about gender roles.

B) LANGUAGE PATTERNS
Voice assistants may be programmed to use language patterns that are traditionally associated with one gender. For example, some voice assistants may use

more traditionally "feminine" language patterns, such as using politeness markers like "please" and "thank you".

C) RESPONSES TO CERTAIN COMMANDS

Voice assistants may be programmed to respond differently to certain commands based on gender stereotypes. For example, a voice assistant may be more likely to offer cooking or cleaning suggestions to a female user than a male user. This is due to the historically and culturally influenced training data.

D) LACK OF REPRESENTATION

The default voices and language patterns used by voice assistants may not adequately represent the diversity of gender identities and expressions. This can lead to a lack of representation and exclusion for certain groups.

E) DESIGN AND REPRESENTATION

Especially, the preset female voice in combination with a female name and an explicit background story of the voice assistants reinforce gender biases. Moreover, they perform tasks traditionally associated with the role of women in society. This conveys the outdated depiction of women as subordinate secretaries, housewives or maids who are readily available.

WHO IS PARTICULARLY AFFECTED BY THESE GENDER BIASES?

A) WOMEN
Women may be particularly affected by gender biases used in AI technology like voice assistants, as they are often used as default voices or language patterns. This can contribute to the reinforcement of gender stereotypes and support societal expectations about gender roles. The line between real women's voices and digital women's voices is blurring. Everything that is projected onto voice assistants, such as women being obliging, compliant and willing helpers available at a moment's notice, can potentially be projected back onto real women.

B) INTER, NON-BINARY, TRANS AND AGENDER PEOPLE
The design of intelligent voice assistance systems expresses a very one-sided version of femininity, or of people with a feminine-sounding voice. People who do not identify with these binary, heterosexual or cisgender categories may be affected by the gender biases in AI. The technology often has only male or female voices and speech patterns, leaving no room for deviation from the norm.

C) CHILDREN
Children may be particularly prone to adopting gender stereotypes used in AI technology like voice assistants, as they are easily influenced by their

experiences. Adult users recognise that the voice is controlled by non-human technology. However, children primarily perceive the female voice. It is therefore unclear how the feminisation of technology affects children's socialisation.

HOW CAN I, AS A USER, DEAL WITH THIS PROBLEM?

A) FIRST STEP
Recognise that gender stereotypes exist in many aspects of society, including in language and technology. It is important to be mindful of these stereotypes and consider the impact they may have on people's perceptions, experiences and decisions.

B) SECOND STEP
Understand that many voice assistants, including Amazon's Alexa and Apple's Siri, are programmed to use certain default voices and language patterns that may reinforce gender stereotypes.

C) THIRD STEP
Consider changing the default voice for your voice assistant to a male voice or a gender-neutral voice. This can challenge and reduce the reinforcement of gender stereotypes.

D) FOURTH STEP
Be mindful of the language you use when interacting with your voice assistant. Avoid using language that reinforces gender stereotypes, such as addressing the assistant as "she" or "her" or using language that is traditionally associated with one gender.

E) FIFTH STEP
Encourage others to do the same.

F) SIXTH STEP
Consider reaching out to the manufacturer of your voice assistant to share your thoughts and concerns about the effect their product may have on users.

By following these steps, you can help to challenge and reduce the reinforcement of gender stereotypes through voice assistants.