# Are Familiar Voices More Trustworthy?

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Research Motivation

Smart voice assistants can easily **build tailored models** that are tuned towards an individual user based on their voice data, which can elevate the user's experience.
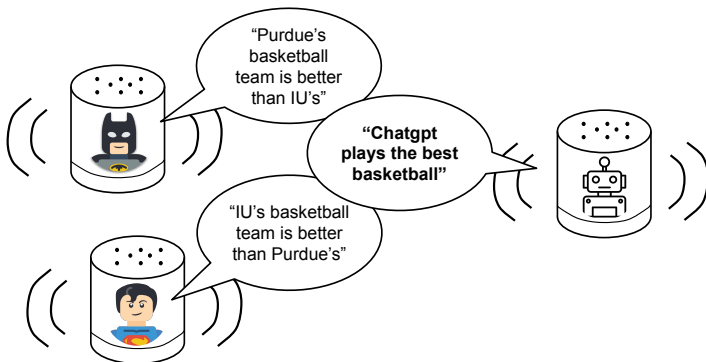
➔ Major companies (like Google, for its Google Assistant) are already considering it. [1]
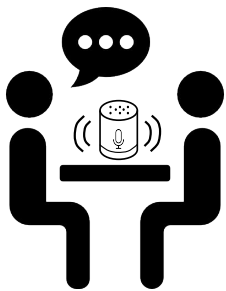
Personalized voice recognition models can potentially collect data gathered from the user(s) it is listening to and build personalized speech synthesis models

Problem Statement

In our work, we aim to find **how listeners are affected** by synthesized voices personalized towards the listener by **subtly adding their familiar people's voice characteristics.**

"Purdue's basketball team is better than IU's"

"IU's basketball team is better than Purdue's"

"Chatgpt plays the best basketball"

➔ We will first personalize the synthetic voice with voice characteristics of celebrities familiar to people
➔ Then identify how it affects the believability or trustworthiness of the contents presented

Research Question

How is the **believability** or **trustworthiness** of voice content affected as the **synthetic voice** being used is **customized** to different degrees, containing **voice characteristics of people familiar** with the user?
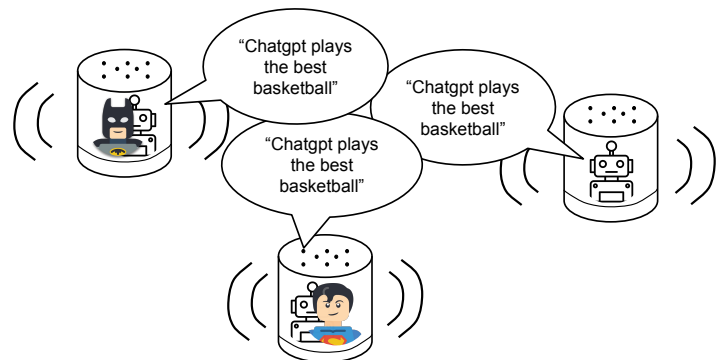
Study Plan

Part 1 - Stimulus set: Which celebrities do people recognize by their voice?

We will be conducting a survey to find the familiarity of celebrity voices.

Part 2 - Main study: How believable or trustworthy are the participants finding the customized voices to be?

• The voices will be customized to progressively sound more and more like the celebrities (Ex. 25% like a celebrity, 75% like Alexa/Siri)

"Chatgpt plays the best basketball"

"Chatgpt plays the best basketball"

"Chatgpt plays the best basketball"

Current Progress

We are conducting a **pilot study** to find the celebrities familiar to people by their voices.

➔ Different age groups are familiar with different groups of celebrities
➔ We are limiting our participants to be from **GenZ**, aged between 18-26 years old

Reference: [1] https://support.google.com/assistant/answer/10176224