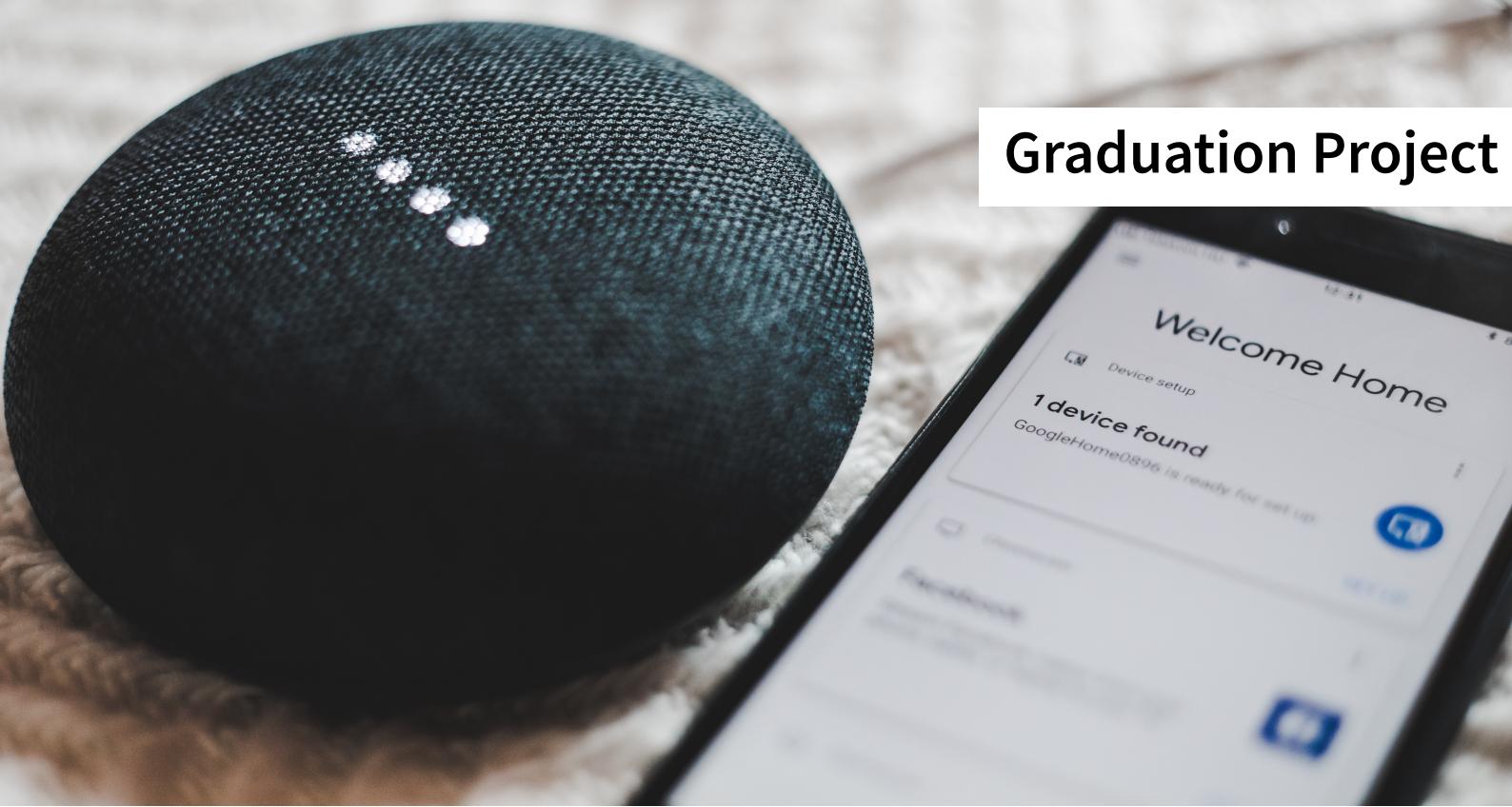


# Graduation Project



## Public Installation for Voice Data Donation on Campus

### Context

Voice assistants, embedded in smart speakers and smartphones, intend to simplify our lives by allowing us to ask for information, or assistance, and control other smart home devices via voice commands or questions. Examples of devices integrating voice assistants include Amazon Alexa, Apple's Siri, and Google Home. Voice assistants use Artificial Intelligence (AI) to recognize and respond to voice commands. For this, developers require large datasets to train the models, however this process could introduce an unconscious bias leading voice assistants not to understand everyone's voices equally. An important step towards reducing bias in these models is to have a diverse dataset, representing different dialects, and genders. However, even though voice assistants are widely deployed, there are only a few publicly

accessible datasets representing diverse speakers. Consequently, it is not possible for developers outside big data-driven companies to develop their own models, or to assess how well existing applications work for diverse speakers.

### Project

In this project you will create a public installation on TU Delft campus. The goal of this installation is twofold. First, to raise awareness on the unconscious bias on smart assistants. Second, to invite staff and students to participate in and share (e.g., on social media) a data donation campaign. You will get to design and prompt potential interactions between people and a Google Home smart assistant.

### Student Profile

In this project you will create a public installation on TU Delft campus. The goal of this installation

is twofold. First, to raise awareness on the unconscious bias on smart assistants. Second, to invite staff and students to participate in and share (e.g., on social media) a data donation campaign. You will get to design and prompt potential interactions between people and a Google Home smart assistant.

### Outcome & Evaluation

You are expected to design, prototype, and evaluate, through predefined metrics, a public installation on the TU Delft campus prompting people to interact with a Google Home device.

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