Do you know what I mean? – How a conversational agent can adapt to confusion

Conversational agents are agents which converse with people, via spoken or written language, having a body (e.g. robot/embodied virtual agent) or not (e.g. chatbot such as Siri, Alexa). In conversations, it often happens that you don't understand what the other is trying to say. This is exactly the same, if not more, the case when conversing with an agent. Research has focused on applying machine learning techniques to the acoustic signal in order to automatically recognize confusion. In this project, you will focus on



the next step: how to solve confusion in conversations between an agent and a human. You will look into literature on both confusion recognition and explainable AI to work on a strategy to solve confusion. For the scope of this master project, you will limit yourself to a specific type of conversational agent and specific type of situation. Which types exactly is open for deliberation, based on your own interests.

Recommended courses: Social Signal Processing, Introductory machine learning courses Other relevant courses: Behaviour Change Support Systems; Socio-cognitive Engineering

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