



# Variations in Listening Behaviour and how to implement them in virtual humans

Dirk Heylen

University of Twente

In our work on building embodied virtual agents that can engage with you in a conversation, we have been looking into what verbal and nonverbal behaviours are appropriate for the agents to employ when they do not have the speaking turn.

For this, we took a closer look at listening behaviours in dyadic human-human interactions. Part of this involved gathering our own corpus of interactions to study variations in behaviours; the MultiLis corpus.

In this talk, I will discuss the various methods we used to get insight into this topic, including the corpus and its analysis; particularly in terms of variations in backchanneling behaviour. Next to that I will spend a bit of time on presenting the success and failure of the algorithms that we arrived at when implementing the generation of listening behaviours in virtual humans.