

Topics for MSc dissertations

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My research area is multimodal communication, and I'm interested in any project that touches on the use and modelling of speech together with other communication modalities, e.g. head movements, facial expressions, hand gestures and body posture. A couple of specific topics are:

- Speaker coordination in online group meetings using data from https://archive.org/details/GEHM_meeting_corpus.
- Uptake of gestural information in real-life scenarios, specifically weather forecasts (using eye-tracking)

I'm also interested in multimodality in a broader sense, for instance studies that use language and visual input, or studies that use behavioural or cognitive features together with language features.

However, I also supervise projects in other areas of relevance for IT and Cognition students. Below is a list of topics from MSc projects I supervised in recent years.

- Linguistic annotation using LLMs
- Authorship style analysis in historical text
- Classification of songs from EEG data
- Dynamic topic modelling applied to Danish news articles
- Generation of text from fMRI scans
- Sentiment and emotion analysis in social media data
- Adaptive personality in a human-robot creative collaborative task
- The influence of user personality on the perception of ambiguous emoji
- Attentional biases in the perception of emotionally valenced facial stimuli
- The emergence of communication in a negotiation game based on a multi-agent reinforcement learning model
- Depression detection based on multimodal features
- The effects of auditory disturbance on attention and short-term memory
- Dating of medieval manuscripts by bimodal classification