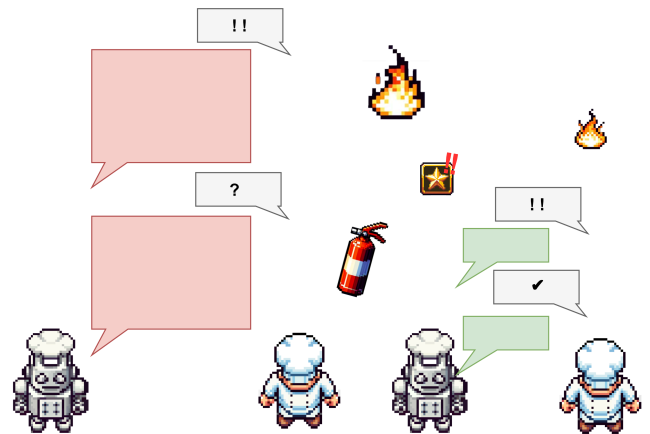




Embrace the Urgency: Short but Precise Agent Speech via LLM and Speech Generation

Bachelor/Master – In a time-pressured kitchen, a collaborative agent that talks too much slows both itself and its human partner down. This thesis explores how such an agent can keep its spoken responses short yet precise. Using a language model to draft utterances and speech synthesis to deliver them, the project investigates how to constrain, time, and ground the agent's speech so that it stays brief, task-relevant, and well-timed instead of verbose. The goal is a concise communication policy that preserves helpfulness while minimizing how long the agent speaks.



Tasks

- Design a concise-speech policy for the agent (prompting, length/verbosity control, and content filtering).
- Integrate LLM-based response generation with speech synthesis for the kitchen agent.
- Evaluate the agent's utterances for brevity, task relevance, and timing against a verbose baseline.

Your Profil

- Basic experience with Python and language-model prompting or application development.
- Interest in natural language processing, speech, and human-computer interaction.
- Comfort working inside a game-based environment.

Interested?

If you are interested or have further questions, please send an email to fschroeder@techfak.uni-bielefeld.de.