Abstract

The thesis *Conversation Design: Principles of Voicebot Design for Natural Communication with People* addresses the question of how robots can naturally interact with humans and aims to create a model of conversational design rules. This will be developed based on insights from the literature and will also be supported by data from real conversations between humans and voicebots. The methodology of this thesis is qualitative analysis.

In the theoretical part of the thesis I discuss how communication between people works. I describe how conversation can be viewed and how conversation analysis approaches it. In the next part I describe how voice assistants work and focus on how they can talk to people. The second part of the thesis is a literature search. Here I explore the approaches and perspectives of authors who are experts in conversation design, UX design, voice technology, linguistics, sociology, psychology and other fields. I summarize the authors' findings into nine competencies and skills that a virtual assistant should have.

In the analytical section, I analyze three virtual assistant scenarios and the calls in which people interacted with them. I look at these scenarios from the perspective of those nine skills and analyze them using a set of questions. In the results of the analysis, I then summarize whether the interpretation of the empirical data has confirmed the need for all of the defined skills, while adding a tenth skill that emerged from the analysis of the calls. I then conclude the thesis by building a model of rules from these findings, which I divide into technological requirements and conversational rules. This model of rules can now be used in the actual creation of a virtual assistant.