Towards Assisting Human-Human Conversations

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The idea of the research is to understand the open-topic conversations and ways to provide assistance to humans who face difficulties in initiating conversations and overcome social anxiety so as to be able to talk and have successful conversations. By providing humans with assistive conversational support, we can augment the conversation that can be carried out. The AdvisorBot can also help to reduce the time taken to type and convey the message if the AdvisorBot is context aware and capable of providing good responses.

There has been a significant research for creating conversational chatbots in open-domain conversations that have claimed to have passed the Turing Test and can converse with humans while not seeming like a bot. However, if these chatbots can converse like humans, can they provide actual assistance in human conversations? This research study observes and improves the advanced open-domain conversational chatbots that are put in practice for providing conversational assistance.

While performing this thesis research, the chatbots were deployed to provide conversational assistance and a human study was performed to identify and improve the ways to tackle social anxiety by connecting strangers to perform conversations that would be aided by AdvisorBot. Through the questionnaires that the research subjects filled during their participation, and by performing linguistic analysis, the quality of the AdvisorBot can be improved so that humans can achieve better conversational skills and are able to clearly convey their message while conversing. The results were further enhanced by using transfer learning techniques and quickly improve the quality of the AdvisorBot.