Leveraging the wisdom of the crowd to realize a character-like chatbot

Ryuichiro Higashinaka

Nagoya University/NTT higashinaka@i.nagoya-u.ac.jp

Having consistent personalities is important for chatbots if we want them to be believable. In this talk, I describe a technique called "role-play based question answering" in which multiple users play the role of certain characters and respond to questions posed by online users, making it possible to collect a large amount of character-associated data that can be used to build character-like chatbots with consistent personalities. I describe the technique in detail as well as a series of experiments performed to verify the usefulness of the collected data. Especially, I will talk about how much users can be motivated to voluntarily provide data, the quality of the collected data, how meta-data such as emotion can be collected and used for response generation, and how recent neural-based methods can be applied to the collected data. I will also describe a large-scale experiment, in which a chatbot based on "role-play based question answering" was used by the general public. I describe how the chatbot was received by the users and show typical errors made by the chatbot, which can give useful insights for improvements.