

HUMAN EMOTION MODEL BASED ON DISCOURSE SENTENCE FOR EXPRESSION GENERATION OF CONVERSATION AGENT

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ABSTRACT. *There was a conversation agent on the generation method of emotion expression. It is necessary for the conversation system like the human for communication. In the previous method, at first, a word which could influence the feeling was defined. Facial expression was changed according to the word which influences the feeling in discourse. But, facial expression could not be changed if there was not a word that was defined in the discourse. Hence we proposed a human emotion model for the expression generation of the conversation agent. The method based on the human emotion model which can solve problem of the previous method and may make a more humanity conversation agent. In this study, we put a human emotion tag to discourse of talks scenarios and model to conversation agent of human emotion. There were two kinds of method that put the human emotion tag to discourse. We make the human emotion model by a scenarios that adopts the human emotion tag. The human emotion model was used to create facial expression of conversation agent. The assessment experiment was performed by using the systems of previous method and two human emotion models, and the results were compared between the three methods.*

Keywords: Emotion, Emotion model, Conversation system, Discourse

1. Introduction. A conversation is one of the several ways for communication. A system that have conversation as a mean of interface between human and computer had been developed. A conversation system was used as a service that is designed to search products and buy tickets. In the system for searching and buying, the conversation is adopted. In the conversation, response to structured sentences is enough. In recent years, the conversation system for communication was becoming more and more necessary. For example, there are conversation robots. Specific technique is necessary for the conversation and human have a friendly feeling for the conversation system. Therefore, non-task-oriented conversational study [1] and artificial emotion study [2, 3] is actively.

There are some differences between the human-to-human conversation and the human-to-computer conversation. Emotion is one of those differences. Human have something of emotions at all times and express their emotions naturally. But computers do not have emotions. Not only language but also emotion is necessary for a friendly communication with human. For example, there are e-mail and Web chat using emoticons and pictographs. Human can communicate only by text in e-mail and Web chat. But, there are many people that express their emotions by use of emoticons and pictographs in e-mail