

Reflective Dialogue System Focusing on User's Event

Name

Shohei Tanaka

Laboratory's name

Augmented Human Communication

Supervisor's name

Satoshi Nakamura

Abstract ([should be within 1st page](#))

This dissertation addressed dialogue systems that generate reflective responses and actions to user utterances. The existing dialogue systems tend to generate not reflective responses and actions that are passive to the user utterances. We proposed architectures to generate reflective responses and actions by focusing on user's events to solve this problem. Since dialogue systems are traditionally categorized into non-task-oriented dialogue systems or task-oriented dialogue systems, we tackled the following three problems of dialogue systems based on this categorization. First, we proposed a model to generate reflective responses on non-task-oriented dialogue. The model selects reflective responses based on events included in user utterances and system responses. Second, we investigated a model to select reflective actions on task-oriented dialogue. The model selects reflective actions based on causality relations between events included in user utterances and system actions. Finally, we developed a model that integrates multimodal information to select reflective actions on multimodal task-oriented dialogue. The model selects reflective robot actions by utilizing user utterances and events included in situations surrounding the user.