# *Abstract:* Socially Interactive Agents in Augmented Learning Environments

Sejin Oh[1] and Yung-Cheol Byun[2,*]
[1] *Convergence R&D Laboratory, LG Electronics*
*Seoul, S. Korea*
*sjin.oh@lge.com*
[2] *Dept. of Computer Engineering, Jeju National University*
*Jeju, S. Korea*
*ycb@jejunu.ac.kr*

## Abstract

In this paper, we present a socially interactive agent that shows appropriate social behavior during interaction with a user in augmented learning environments. The agent perceives situational information associated with a user's performance in learning tasks. To enhance social interaction between the user and the agent, we make the agent have an explanatory inclination toward the user's propensity to explain the circumstances. The agent appraises the user's situation based on the explanatory style and generates companion-like social responses to the situation. To show the effectiveness of the proposed agent, we apply it to an animated bluebird that shows anthropomorphic visual and verbal expressions. We make the bluebird collaborate with a user to achieve learning tasks in an augmented learning system. Through usability tests, we subsequently observed that participants preferred to interact with the bluebird as a social partner. Therefore, we expect that a socially interactive agent could be a key factor for motivating a user's participation in augmented learning environments.