先端科学技術研究科　修士論文要旨

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要旨			

Individuals with social anxiety often face heightened anxiety during face-to-face conversations due to their fear of negative judgments when perceiving neutral facial expressions from others. This research aims to alleviate this anxiety by introducing a novel approach that manipulates the facial expressions of conversational partners. Our solution involves overlaying visual effects via an Augmented Reality Head-Mounted Display (AR HMD) to transform conversational partners' facial expressions into more positive ones. An online survey with 91 respondents with social anxiety provided insights into the types of visual effects contributing to conversational ease. Results highlight that overlaying an anime-style avatar or a smiling face photo significantly enhances conversational comfort. Based on survey findings, we developed an AR application for HoloLens2, enabling users to overlay either an anime-style avatar or a smiling face photo during in-person interactions. A user study with 29 participants compared three conditions: control, anime-style avatar, and smiling face photo. Findings reveal two significant outcomes: (1) Implementing an anime-style avatar notably enhances conversational comfort, and (2) Individuals with pronounced social interaction anxiety and intense fear of negative evaluation derive substantial benefits from our AR-based system. Based on the findings, this research discusses redesigning and enhancing our AR applications, particularly focusing on avatar interactions in AR environments. This research paves the way for practical solutions to enhance the well-being of individuals with social anxiety during in-person conversations.