Smoothing Human-Robot Speech Interaction with Blinking-Light Expressions

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We propose a method to enable smooth speech interactions between a user and a robot. Our method is based on subtle expression whereby a robot blinks a small LED attached to its chest. We performed experiments in which participants played a last-and-first games and counted the number of repetitions made by the participants and analyzed their impression of the game and the robot. The experimental results suggested that the blinking-light could prevent utterance collisions between a user and a robot and could create familiar and attentive impressions about the game on users.