Detection of Hidden Laughter for Human-agent Interaction

Shiho Tatsumi, Yasser Mohammad, Yoshimasa Ohmoto, Toyoaki Nishida

Abstract:

Our goal is to make a system to detect the times at which one almost laughed but he or she did not show their laughter on his/her face. We define this kind of laughter as hidden laughter. To accomplish this goal, we first tried making decision trees to detect one's amusement, the input data of which were physiological indices. We used 10-fold cross validation to evaluate the trees, and their accuracy was more than 70%. In addition, we investigated the effect of cultural background on the accuracy.

Keywords:

laughter; hidden laughter; physiological index; FEMG; SCR; ECG; diaphragm

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