Face-Face-Revolution: A game in real-time facial expression recognition

Jim Tanaka (Univ. of Victoria), Marni Bartlett (UC San Diego), Javier Movellan (UC San Diego), Gwen Littlewort (UC San Diego), Serena Lee-Cultura (Univ. of Victoria)

Abstract

Face-Face-Revolution is an interactive, computer game intended to enhance the facial expression abilities of children with autism. The game utilizes the Computer Expression Recognition Toolbox (CERT) developed by Marni Bartlett and Javier Movellan at UC San Diego’s Machine Perception Lab. In Face-Face-Revolution, the child is visually cued to produce the facial expressions of happy, angry, sad and disgusted. The child’s productions are analyzed in real time by the CERT engine and scored accordingly. The child’s goal is to accumulate a maximum number of expression points in the allotted time period.