Proposed Solutions Based on Affective Computing

Authors : Diego Adrian Cardenas Jorge, Gerardo Mirando Guisado, Alfredo Barrientos Padilla

Abstract : A system based on Affective Computing can detect and interpret human information like voice, facial expressions and body movement to detect emotions and execute a corresponding response. This data is important due to the fact that a person can communicate more effectively with emotions than can be possible with words. This information can be processed through technological components like Facial Recognition, Gait Recognition or Gesture Recognition. As of now, solutions proposed using this technology only consider one component at a given moment. This research investigation proposes two solutions based on Affective Computing taking into account more than one component for emotion detection. The proposals reflect the levels of dependency between hardware devices and software, as well as the interaction process between the system and the user which implies the development of scenarios where both proposals will be put to the test in a live environment. Both solutions are to be developed in code by software engineers to prove the feasibility. To validate the impact on society and business interest, interviews with stakeholders are conducted with an investment mind set where each solution is labeled on a scale of 1 through 5, being one a minimum possible investment and 5 the maximum.

Keywords : affective computing, emotions, emotion detection, face recognition, gait recognition
Conference Title : ICACII 2016 : International Conference on Affective Computing and Intelligent Interaction
Conference Location : Paris, France
Conference Dates : May 16-17, 2016