Abstract

Keystroke Dynamics or typing dynamics refers to the method of identifying or confirming the identity of a person based on the typing pattern by checking the various timing information obtained when a key is pressed and released. It has been hypothesized that a user’s keystroke patterns change according to his/her emotions. However, there were only limited investigations about the phenomenon itself in previous studies. The work in this paper is based on the use of auditory stimuli to check the influence of keystroke patterns and its variations according to the emotions of an individual. The advantages of using this method are that the data collected through this approach is non-intrusive and easy to obtain. The proposed system is of a controlled experiment to collect keystroke data from multiple subjects in a variety of emotional states induced by International Affective Digitized Sounds (IADS) using an Android Application. To examine the data collected, Two-way Valence (3) x Arousal (3) ANOVAs is applied. The work in this paper aims to prove that keystroke duration and latency are influenced by valence and arousal.
References


Index Terms

Computer Science Pattern Recognition

Keywords

Android, Arousal, Auditory stimuli, Authentication, Emotions Recognition, Keystroke Dynamics, Valence