

Analyzing emotion patterns based on cutaneous temperature

E. L. da Costa; G. Alves do Nascimento; S. Gomes Soares Alcalá; T.M. Gonçalves de Andrade Barbosa

Abstract-

Physical and psychological diseases are problems that may be difficult to detect before they reach serious stages. However, the human body can manifest minute signals that can be identified and interpreted as warnings about a person's health. Consequently, preventative actions can be taken. Even though it has been a challenge, due to different signals patterns between subjects, these signals can be collected and analyzed by devices which can offer real-time feedback for the user. This article presents a study based on cutaneous temperatures collected from undergraduate students when stimulated to different kinds of emotions. The goal is to correlate the kinds of emotions with specific temperature patterns observed. The results are satisfactory once it was possible to observe a pattern in temperature variation during situations of stress and relaxation.

Index Terms- Affective computing; stress; cutaneous temperature.

Due to copyright restriction we cannot distribute this content on the web. However, clicking on the next link, authors will be able to distribute to you the full version of the paper:

[Request full paper to the authors](#)

If your institution has an electronic subscription to Communications on Applied Electronics, you can download the paper from the journal website:

[Access to the Journal website](#)

Citation:

A. do Nascimento, G.; Barbosa, T.M.; Gomes Soares Alcalá, S.; L. da Costa, E. "Analyzing emotion patterns based on cutaneous temperature", *Communications on Applied Electronics*, vol.5, no.6, pp.6-10, July, 2016.