Monitoring Movements of the Human Eye

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Abstract

This work is devoted to assessing the convenience graphic interface of software for mobile devices. In this article we propose the method of assessing the convenience graphical user interface (UI) that does not require the participation of third parties, i.e. process will be automated. To automate the process you can use the trajectory of user's eye movement over the test object. By analyzing this trajectory, we can draw conclusions about the most uncomfortable elements for user and decide to change them.

The purpose of eye-tracking is to find an eye with high accuracy. Also an algorithm should be robust to illumination changes, eye occlusions and variance of eyes among the people. There are low-cost solutions of these

Index Terms: usability, eye - tracking, eye movements, saccades, GUI.