

Title: Mining Physiological Data for Automated Educational Feedback

Author: Bc. Kateřina Bašátková

Department: Department of Physics Education

Supervisor: doc. RNDr. Zdena Lustigová, CSc., Department of Physics Education

Abstract: This thesis deals with mining physiological data for automated educational feedback. The first part summarizes former researches of physiological data and its assertion into human behaviour. Special attention is devoted especially to eye tracking and measuring heart rate during behavioral processes. The second part is dedicated to author's own research how blink rate and heart rate are influenced by the degree of cognitive load. The research was executed on six subjects. The obtained data confirm correlation of blink rate and heart rate with the difficulty of the task.

Keywords: heart rate, heart rate variability, blink rate, cognitive load