Conscious Brain Involvement Monitor

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Abstract. In the paper authors, who served as mentors of IEEE CSIDC project, present the BlueEyes system designed by the winning team of students from Poznań University of Technology. The system devoted to monitor human operator is composed of the mobile Data Acquisition Unit and the Central System Unit. The units are connected using Bluetooth technology. Jazz Multisensor connected to the mobile unit measures several physiological parameters which are collected and transmitted to the central unit for analysis and recording. The most important parameters are the eyes movement velocities which serve as a basis for monitoring the conscious brain involvement.

Key words: conscious brain involvement, eye movement, saccadic activity, Bluetooth technology, decision trees, human operator monitoring