
ABSTRACTS

*Received: 23 Nov. 2016**Accepted: 02 Dec. 2016***EDUCATIONAL MODELS FOR MECHATRONIC COURSES**

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Keywords: mechatronics, education, embedded systems, microcontroller

Abstract: The paper deals educational model based on embedded system via using the microcontroller. The quality of education is supported through the using of these educational models. Students learn on practical exercises and experiences. That is the best way how to tech mechatronics.

*Received: 22 Nov. 2016**Accepted: 03 Dec. 2016***USE OF CHILDREN'S GAMES IN ROBOTICS**

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Keywords: gesture, OpenCV, Kinect, game

Abstract: The aim of this paper is overall proposal of artificial or robotic player for the game Rock – Paper – Scissors. The main contribution of this paper is the algorithm, which guarantees invincibility of artificial player against human player. Such algorithm could be than expanded by probabilistic model imitating other human players. As the basic hardware component RGB-D camera was chosen. Developed software is based on free libraries like OpenNI or OpenCV allowing wide distribution of such artificial player among scientific and professional public.

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COMPUTER SIMULATION OF THE MECHANICAL SYSTEM WITH ONE DEGREE OF FREEDOM

(pages 13-18)

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Keywords: simulation, mechanical system, equation of motion, Matlab, Simulink

Abstract: This paper deals with analyze the model of the oscillating mechanical system with one degree of freedom. In this article the vibration of the car seat with driver is solved. It is a problem that is common in technical practice in the assessment of driver comfort when driving a car. It presents the possibilities of physical modeling in Matlab/Simulink. When used, it is necessary to describe the studied system with dynamic equations. The task of the paper is to create a mathematical model and computer simulation model. The results of these solutions are created in the form of graphs.
