

**KEGA 010ZU-4/2013 Modernization of didactic equipment and teaching methods with a focus on the area of robotics**

The project was focused on building the robotic laboratory – getting hardware and software means making possible to extend practical knowledge in the field of robotic systems, and building knowledge and information background for the new course in Robotic systems

Realization: 01/2013-12/2015

Coordinator: Ales JANOTA (DCIS)

Some of publications:

1. JANOTA, A. – SIMAK, V. - NEMEC, D. - HRBCEK, J.: Improving precision and speed of Euler angles computing from low cost sensor data. *Sensors*, 15(3), pp. 7016-7039, ISSN 1424-8220, doi: 10.3390/s150307016 <http://acta.fih.upt.ro/pdf/2015-1/ACTA-2015-1-07.pdf>
2. SIMAK, V. - HRBCEK, J. - JANOTA, A. - PIRNIK, R.: Implementation of artificial intelligence tools to an industrial controller. *Archives of Transport System Telematics*, Volume 7, Issue 3, 2014, s. 47-51 [http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-eddd864c-ffc8-41d9-933c-59bc0e16117e/c/ATST2014\\_3\\_SIMAK\\_HRBCEK\\_JANOTA\\_PIRNIK.pdf](http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-eddd864c-ffc8-41d9-933c-59bc0e16117e/c/ATST2014_3_SIMAK_HRBCEK_JANOTA_PIRNIK.pdf)
3. ZDANSKY, J. - RASTOCNY, K. - HRBCEK, J.: Influence of Architecture and Diagnostic to the Safety Integrity of SRECS Output Part. In: 20-th international conference Applied electronics 2015, Pilsen, University of West Bohemia, 8.-9. September 2015, pp. 297-301. <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=7301109>
4. HRUBOS, M. – JANOTA, A. – MIKLOSIK, I.: Algorithm for Analysis of Road Surface Degradation. *Tools of Transport Telematics. Communications in Computer and Information Science*, Vol. 531, pp. 81-89, Springer International Publishing, Switzerland; Jerzy Mikulski (Ed.), October 12, 2015, doi: 10.1007/978-3-319-24577-5 <http://www.springer.com/us/book/9783319245768>