U petak 11. svibnja 2018., u Vijećnici Tehničkog fakulteta Sveučilišta u Rijeci, s početkom u 12:00 sati održati će predavanje, dr. sc. Matej Babič (postdoktorand Jožef Stefan instituta - Ljubljana), na temu:

New method of hybrid system of machine learning using a new method for statistical pattern recogniton by using network theory

Abstract
Every material's surface possesses a certain amount of roughness. In nature a perfectly flat surface does not exist. The main properties of products made of metallic materials depend not only on the manufacturing parameters. To a large extent they are determined by the roughness of their surfaces. In this paper a new method for statistical pattern recognition (using network theory) and its application on the determination of surface roughness is presented. Method is intended for the analysis of SEM images recorded on samples produced by the process of robot laser hardening. It is designed to predict the level of roughness of hardened materials. The data characterizing the state of surface irregularities detected as extremely small segments contain indicators of surface roughness. In this paper different methods of machine learning techniques designed to predict the roughness of robot laser hardened material are presented.
Keyword: Pattern recognition, network theory, roughness, machine learning

CV - predavača

Matej Babič received his Ph. D. degree in Computer Science in 2014 from the Faculty of Electrical Engineering and Computer Science of the University of Maribor. Slovenia. He studied Mathematics at the Faculty of Education in Maribor. He concluded postdoc at Jožef Stefan Institute, Ljubljana, Slovenia. His research interest is in fractal geometry, graph theory, intelligent systems, hybrid machine learning and topography of materials after hardening.