

Contents

Plenary talk	1
Renewable Energy Sources and Employment	
Zwetelina Gankova–Ivanova	1
Session Informatics	3
“Hygiene Factors” of Usability (Precondition for GUI Acceptability)	
Svetla Ivanova-Vassileva	5
Associativity of Visual Metaphors and User Performance (Study of a Banking Application)	
Svetla Ivanova-Vassileva	9
Informational aspects of modelling the Health Regions in Bulgaria	
Velko Ilchev, Aleksandar Tsenov	13
Methods for Eventual Consistency in Collaborative Editing Systems	
Boyan Katsarski, Velko Iltshev	17
Mixed-Reality Spatial Configuration with a ZED Mini Stereoscopic Camera	
Dimo Chotrov, Zlatka Uzunova, Yordan Yordanov, Stoyan Maleshkov	21
Prediction of EIGRP Traffic Parameters by 3D Approximation Using Neural Networks	
Irina Topalova	25
Session Mechatronics	29
Navigator System for Virtual Manufacturing Process	
Hashem Badra, Jivka Ovtcharova	31
Integral Brake System for Electric Motorcycle Using Maximum Energy Regeneration	
Georgi Yanachkov, Simona Hesapchieva	35
Design of a mobile platform for the evaluation of Localization and Mapping Algorithms	
Stefan Hensel, Marin B. Marinov, Christoh Kehret	39
Location based calibration of low cost particulate matter sensors	
Ivan P. Topalov	43
Session Economics	47
Competence of Employees in the Context of Digitalization	
Anna-Maria Staiger, Malte Fiedler, Wolfgang Fritz, Dietrich von der Oelsnitz	49
Session Student Papers	53
Using Formant as an indication of speech intelligibility in VOIP	
Angel Garabitov, Aleksandar Tsenov	55
Application of Hilbert Transform for Phased Antenna Array Calibration	
Daniel Hristov	59
Utilizing Blockchain technology for data analysis and interaction through The Formal Method of Things	
Blagovest Kirilov	63