

## **CONTENTS**

<b>EDITORIAL.....</b>	<b>7</b>
<b>Chapter 1</b>	
Ernest ANTOLAK, Andrzej PUŁKA The Hierarchical Model of a Flexible Predictable System for Time Critical Data Processing .....	9
<b>Chapter 2</b>	
Kamil BORSUK, Tomasz NYCZ, Monika NYCZ Efficiency Analysis for Solving Systems of Equations with GPU .....	23
<b>Chapter 3</b>	
Agnieszka CHODOREK, Robert R. CHODOREK Opportunities to Deploy Browser Extensions for On-line Monitoring of WebRTC Transmissions in an Automatic Manner .....	42
<b>Chapter 4</b>	
Adam DUSTOR Speaker Verification in Python Based On SIDEKIT Toolkit .....	63
<b>Chapter 5</b>	
Jarosław FLAK, Dariusz CABAN Wireless System for Dynamic Sound and Light Indicating Evacuation Routes in Mines.....	79
<b>Chapter 6</b>	
Piotr GRZESIK Evaluation of Apache Edgent for Stream Analytics at the Edge .....	96
<b>Chapter 7</b>	
Krzysztof HANZEL, Krzysztof PASZEK, Damian GRZECHCA Possibilities of Using Data From The UWB System for the Validation of ADAS Subsystems .....	108
<b>Chapter 8</b>	
Hemin Akram MUHAMMAD, Ludek LUKAS Evaluating Privacy Principles of Government and Commercial Organization Websites in Kurdistan Region of Iraq .....	125

**Chapter 9**

- Marcin KARCZ, Jarosław FLAK  
Zigbee Network in Development of Evacuation Systems in Mines ..... 138

**Chapter 10**

- Mateusz KUC, Wojciech SUŁEK, Dariusz KANIA  
Power Consumption in QC-LDPC Decoders..... 155

**Chapter 11**

- Krzysztof PASZEK, Krzysztof HANZEL, Damian GRZECHCA  
The Use of Artificial Neural Network to Increase the Accuracy of the UWB  
Positioning System..... 164

**Chapter 12**

- Agnieszka PIOTROWSKA  
Performance Evaluation of Reliable Multicast Transmission in Multi-hop Wireless  
Networks ..... 180

**Chapter 13**

- Michał SAWICKI, Michał MAĆKOWSKI  
Anti-pattern Of USB 3.1 Usage in the Multimedia System..... 201

**Chapter 14**

- Jacek STÓJ, Ireneusz SMOŁKA  
The Use of Software Defined Network for Process Data Extraction – Proof of  
Concept ..... 209

**Chapter 15**

- Anna WACHOWICZ  
IoT Monitoring Systems in Beekeeping ..... 222
- Authors Index..... 239
- About IEEE..... 241