

# Contents

<b>Intelligent Vehicular Networking and Applications</b>	
<b>Investigating Public Opinion Regarding Autonomous Vehicles: A Perspective from Chiang Mai, Thailand . . . . .</b>	<b>3</b>
Kenneth Cosh, Sean Wordingham, and Sakgasit Ramingwong	
<b>A Study of Conceptual Connected Communication Vehicular Network Using Distributed Cluster Algorithm . . . . .</b>	<b>11</b>
Han-Chun Song and Jinhong Kim	
<b>Healthcare and Wellness</b>	
<b>EEG Based Classification of Human Emotions Using Discrete Wavelet Transform . . . . .</b>	<b>21</b>
Muhammad Zubair and Changwoo Yoon	
<b>Real-Time Posture Correction Monitoring System for Unconstrained Distraction Measurement. . . . .</b>	<b>29</b>
Ji-Yun Seo, Yun-Hong Noh, and Do-Un Jeong	
<b>A Study of Job Competencies for Healthcare Social Work in Case-Based Discussion in Taiwan . . . . .</b>	<b>33</b>
Yi-Horng Lai, Hui-Yun Xiong, Shu-Chen Hsueh, and I-Jen Wang	
<b>Observation of Continuous Blood Pressure with Posture Change Using a Wearable PTT Monitoring System . . . . .</b>	<b>41</b>
Yun-Hong Noh, Ji-Yun Seo, and Do-Un Jeong	
<b>Real-Time ECG Monitoring System Based on the Internet of Things Using an Optimum Transmission Technique . . . . .</b>	<b>45</b>
Yun-Hong Noh, Ji-Yun Seo, and Do-Un Jeong	
<b>A Study on Programs Applying the Internet of Things (IoT) for Prevention of Falls in the Elderly . . . . .</b>	<b>49</b>
SeungAe Kang	

<b>Smart Care to Improve Health Care for the Elderly . . . . .</b>	<b>54</b>
SunYoung Kang and SeungAe Kang	
<b>Web Technology and Applications</b>	
<b>Trip Basket: Web Characterization for Smart Tourism . . . . .</b>	<b>61</b>
Wasana Ngaogate	
<b>Trust Blog Ranking Using Multi-Criteria Decision Analysis AHP and TOPSIS . . . . .</b>	<b>68</b>
Nurul Akhmal binti Mohd Zulkefli, Baharum bin Baharudin, and Abas bin Md Said	
<b>SCADA/HMI Systems for Learning Processes of Advanced Control Algorithms . . . . .</b>	<b>77</b>
Christian P. Carvajal, Leonardo A. Solís, J. Andrés Tapia, and Víctor H. Andaluz	
<b>Virtual Reality on e-Tourism . . . . .</b>	<b>86</b>
Juan C. Castro, Mauricio Quisimalin, Víctor H. Córdova, Washington X. Quevedo, Cristian Gallardo, Jaime Santana, and Víctor H. Andaluz	
<b>Proposing a Key Model e-Commerce Towards Digital Economy for Coastal Areas in Indonesia . . . . .</b>	<b>98</b>
Bani Pamungkas, Siti Rohajawati, Devi Fitrianah, Ida Nurhaida, and H.H. Wachyu	
<b>A Fixed-Function Rendering Pipeline with Direct Rendering Manager Support . . . . .</b>	<b>106</b>
Nakhoon Baek	
<b>Internet of Things</b>	
<b>Implementation of an Adaptive Design for the Iterative-MIMO Smart Sensor Detectors to Increase Energy Efficiency in Realistic Channel Conditions . . . . .</b>	<b>113</b>
Nina Tadza	
<b>Implementation of Precision Deburring System Using Dissolved Gas Control . . . . .</b>	<b>123</b>
Young-Dong Lee and Do-Un Jeong	
<b>Cache Reuse Aware Replacement Policy for Improving GPU Cache Performance . . . . .</b>	<b>127</b>
Dong Oh Son, Gwang Bok Kim, Jong Myon Kim, and Cheol Hong Kim	

**Security and Privacy**

**Security Perspective in Comparative Study of Platform-Based and Platform-Less BYOD Systems** . . . . . 137  
Nithin R. Aenugu, Sergey Butakov, Pavol Zavarsky, and Shaun Aghili

**An Energy-Efficient Key Agreement Mechanism for Underwater Sensor Networks.** . . . . 146  
Yue Zhao, Bo Tian, Zhouguo Chen, Yiming Liu, and Jianwei Ding

**Simulation Study of Single Quantum Channel BB84 Quantum Key Distribution** . . . . . 159  
Oi-Mean Foong, Tang Jung Low, and Kah Wing Hong

**Audit Plan for Patch Management of Enterprise Applications** . . . . . 168  
Lois Odilinye, Sergey Butakov, and Shaun Aghili

**Evading Tainting Analysis of DroidBox by Using Image Difference Between Screen Capture Images** . . . . . 176  
Dae-Boo Jeong and Man-Hee Lee

**Social Media Information Security Threats: Anthropomorphic Emoji Analysis on Social Engineering** . . . . . 185  
Kennedy Njenga

**Personal Data Protection Act Enforcement with PETs Adoption: An Exploratory Study on Employees’ Working Process Change** . . . . . 193  
May Fen Gan, Hui Na Chua, and Siew Fan Wong

**An Improved Iris Segmentation Technique Using Circular Hough Transform** . . . . . 203  
Kennedy Okokpujie, Etinosa Noma-Osaghae, Samuel John, and Akachukwu Ajulibe

**Comparative Analysis of Fingerprint Preprocessing Algorithms for Electronic Voting Processes** . . . . . 212  
Kennedy Okokpujie, Noma-Osaghae Etinosa, Samuel John, and Etta Joy

**Design and Implementation of a Dynamic Re-encryption System Based on the Priority Scheduling.** . . . . 220  
Duk Gun Yoon, Kyu-Seek Sohn, and Inwhee Joe

**Network Forensics Investigation for Botnet Attack** . . . . . 228  
Irwan Sembiring and Yonathan Satrio Nugroho

**Author Index.** . . . . . 237

IT Convergence and Security 2017

Volume 2

Kim, K.; Kim, H.; Baek, N. (Eds.)

2018, XVII, 238 p. 117 illus., Hardcover

ISBN: 978-981-10-6453-1