Table of Contents

A New Internet of Things Architecture with Cross-Layer Communication Alberto Messias da Costa Souza Souza and Jose Roberto de Almeida Amazonas Amazonas	1
DIYbetes: a Mobile Platform for Empowering Type 2 Diabetes Mellitus Patients Mario Zenha-Rela, Ana Matos, Lelita Santos, Miguel Antunes, Joao Costa, and Marta Oliveira	7
An Analysis of Educational Big Data in University Using Mobile E-portfolio System with Smart Concierge Noriko Hanakawa and Masaki Obana	13
Enhancing Ultrasonic Robot Positioning Accuracy with Parallel Codes Acquisition of Composite Pseudo-noise Sequences Jen-Fa Huang, Chun-Chieh Liu, and Kun-Fong Lin	19
A Method for Custom Movement Generation in Wireless Mobile Network Simulation Hawra Alseef, John DeDourek, and Przemyslaw Pochec	27
A Longitudinal Study on Flipping the Classroom in a College Level English Course: Performance of undergraduate students at the Lebanese International University (LIU) Fawziya Tarhini, Dina Shouman, Anwar Kawtharani, Hanadi Saleh, and Hassan Khachfe	33
Media Form Effect on Children's Attention Chun-Chun Wei and Min-Yuan Ma	38
Rehabilitation System in 3D Natural Scenes Amin Safaei and Q. M. Jonathan Wu	42
Performance Study of Channel-QoS Aware Scheduler in LTE Downlink Using NS3 Adi Syukri Md Yusof, Kuokkwee Wee, Ee Mae Ang, and Mohd Fikri Azli Abdullah	44
Dynamic Node Movement Control in a Mobile Medium Ad hoc Network Hanin Almutairi, John DeDourek, and Przemyslaw Pochec	50
E-business Collaboration Club: A Case of Public Relation and Information Technology Yuh-Wen Chen, Jung-Cheng Hsieh, and Steve Hsieh	55
Profiling Users in the Smart Grid Carl Chalmers, William Hurst, Michael Mackay, and Paul Fergus	60
Towards Integrated Engineering of Adaptive Resilient Systems Elena Troubitsyna	66

Analyze OSPF Convergence Time in the Presence of Single and Multiple Failures Cristina-Loredana Duta, Laura Gheorghe, and Nicolae Tapus	72
The Transmission Protocol of Sensor Ad Hoc Networks Andrzej Marczak	79
Securing Indirect Communication for Advanced Metering Infrastructure in Smart Mustafa Saed, Kevin Daimi, and Nizar Al Holou	84
Detection of Advanced Persistent Threats Using System and Attack Intelligence Alberto Redondo Hernandez, Aitor Couce Vieira, and Siv Hilde Houmb	91