# Table of Contents

## Safety and Health

**Assuring the Safety of On-Demand Medical Cyber-Physical Systems**  
Andrew King, Lu Feng, Oleg Sokolsky and Insup Lee  

**Lifelog-Based Active Movement Assistant System**  
Yusuke Satonaka, Takumi Kitazawa, Kazuki Suzuki, Yuki Fukuzaki, Takuya Azumi and Nobuhiko Nishio  

**Defending Malicious Attacks in Cyber Physical Systems**  
Chia-Mei Chen, Han-Wei Hsiao, Peng-Yu Yang and Ya-Hui Ou  

**Responsive Alert Delivery over IP Network**  
Y. Z. Ou, C. M. Huang, C. T. Hu, E. T. H. Chu, C. S. Shih and Jane W. S. Liu

## Security and Privacy

**On-Chip Control Flow Integrity Check for Real Time Embedded Systems**  
Fardin Abdi Taghi Abad, Joel Van Der Woude, Yi Lu, Stanley Bak, Marco Caccamo, Lui Sha, Renato Mancuso and Sibin Mohan  

**Privacy Preserving Origin-Destination Flow Measurement in Vehicular Cyber Physical Systems**  
Yian Zhou, Shigang Chen, Zhen Mo and Yafeng Yin

## Design and Exploration

**A Tool Integration Approach for Architectural Exploration of Aircraft Electric Power Systems**  
Hokeun Kim, Liangpeng Guo, Edward Lee and Alberto Sangiovanni-Vincentelli  

**CPSSim: Simulation Framework for Large-Scale Cyber-Physical Systems**  
Chi-Sheng Shih and Chia-Tse Chu  

**Application Patterns for Cyber-Physical Systems**  
Jong-Seok Choi, Tim McCarthy, Maneesh Yadav, Minyoung Kim, Carolyn Talcott and Eric Gressier-Soudan

## Control and Systems

**ART-Linux for High-Frequency System Control**  
Satoshi Kagami, Youichi Ishiwata and Koichi Nishiwaki  

**An RFID Indoor Positioning System by Using Weighted Path Loss and Extreme Learning Machine**  
Han Zou, Hengtao Wang, Lihua Xie and Qing-Shan Jia
Efficient Spatial Data Recovery Scheme for Cyber-physical System  
Naushin Nower, Yasuo Tan and Azman Osman Lim

Study of Temperature Control using Cyber-physical System Approach in Home Entertainment  
Wai Wai Shein, Zhuo Cheng, Yasuo Tan and Azman Osman Lim

Sensors and Modeling

Stochastic Online Sensor Scheduler for Remote State Estimation  
Junfeng Wu, Yilin Mo and Ling Shi

Game-Theoretic Resilience Analysis of Cyber-Physical Systems  
Fei He, Jun Zhuang, Nageswara Rao, Chris Ma and David Yau

Energy-Efficient Sensor and Task Scheduling for Extending Battery Life in a Sensor Node  
Qian Zhao and Yukikazu Nakamoto

How many are you (an approach for the smart world)?  
Michele Albano, Nuno Pereira and Eduardo Tovar

Applications and Analysis

GPU Implementations of Object Detection using HOG Features and Deformable Models  
Manato Hirabayashi, Shinpei Kato, Masato Edahiro, Kazuya Takeda, Taiki Kawano and Seiichi Mita

Understanding Human-Place Interaction from Tracking and Identification of Many Users  
Donghoon Lee and Songhwai Oh

User Mobility-Aware Decision Making for Mobile Computation Offloading  
Kilho Lee and Insik Shin

Enclosing the Behavior of a Hybrid System up to and Beyond a Zeno Point  
Michal Konecny, Walid Taha, Jan Duracz, Adam Duracz and Aaron Ames