2014 IEEE 38th International Computer Software and Applications Conference Workshops

(COMPSACW 2014)

Vasteras, Sweden
21-25 July 2014
2014 IEEE 38th Annual International Computers, Software and Applications Conference Workshops

COMPSACW 2014

Table of Contents

Message from the Workshops Chairs..........................................................................................................................xvi
Message from the Workshop Organizers—IWSC 2014 ............................................................................................xviii
Message from the Workshop Organizers—ADMNET 2014 ....................................................................................xviii
Message from the Workshop Organizers—STPSA 2014 ..........................................................................................xix
Message from the Workshop Organizers—MidArch 2014 .........................................................................................xx
Message from the Workshop Organizers—WRMOCC 2014 ......................................................................................xxii
Message from the Workshop Organizers—SocNet 2014 ..........................................................................................xxiv
Message from the Workshop Organizers—UCDAS 2014 .........................................................................................xxv
Message from the Workshop Organizers—BioT 2014 .............................................................................................xxvi
Message from the Workshop Organizers—CFSE 2014 ............................................................................................xxvii
Message from the Workshop Organizers—ESAS 2014 .........................................................................................xxviii
Message from the Workshop Organizers—CORCS-IEESD 2014 .............................................................................xxxi
Message from the Workshop Organizers—SAPSE 2014 ..........................................................................................xxxii
Message from the Workshop Organizers—SSERV 2014 ...........................................................................................xxxiii
Message from the Workshop Organizers—QUORS 2014 .........................................................................................xxxiv
Message from the Workshop Organizers—CDS 2014 .............................................................................................xxxv
Message from the Workshop Organizers—WASCOM 2014 .....................................................................................xxxvi
Message from the Workshop Organizers—STA 2014 ...............................................................................................xxxvii
Message from the Workshop Organizers—SSS 2014 ...............................................................................................xxxviii
Message from the Workshop Organizers—MediComp 2014 ....................................................................................xxxix
Message from the Workshop Organizers—MVDA 2014 ..........................................................................................xl

IWSC 2014: 11th IEEE International Workshop on Software Cybernetics
Joint Workshop Session and Keynote Address
Adaptive Management of Energy Packets ......................................................................................................................1
E. Gelenbe

Adaptation and Evolution Techniques for Software Quality
Design of Intelligent Checkers to Enhance the Security and Safety of Cyber Physical Systems .................................................................7
Giedre Sabaliauskaite and Aditya P. Mathur
Countermeasures to Enhance Cyber-physical System Security and Safety ..................................................................................13
Giedre Sabaliauskaite and Aditya P. Mathur
Controlling and Being Creative: Software Cybernetics and Creative Computing .................................................................19
Hongji Yang and Lu Zhang

Monitoring and Control for Software Systems and Testing
A Study on Migration Technique Using Program Slicing for Large-Scale Information and Control Systems .................................................................25
Tomoyuki Mochizuki, Akitoshi Shimura, and Takayuki Takezawa
A History-Based Dynamic Random Software Testing ........................................................................................................31
Lei Zhang, Bei-Bei Yin, Junpeng Lv, Kai-Yuan Cai, Stephen S. Yau, and Jia Yu
Dynamic Random Testing with Parameter Adjustment ........................................................................................................37
Zijiang Yang, Beibei Yin, Junpeng Lv, Kaiyuan Cai, Stephen S. Yau, and Jia Yu

ADMNET 2014: Second IEEE International Workshop on Architecture, Design, Deployment and Management of Networks and Applications

Theory
Fair Optimization—Methodological Foundations of Fairness in Network Resource Allocation .......................................................................................43
Wlodzimierz Ogryczak
Maxmin Fairness under Priority for Network Resource Allocation Tasks ..........................................................................................49
Mario Köppen, Kei Ohnishi, and Masato Tsuru

Network
Modeling of Dynamic Trend of Latency Variations on Mobile Network Using Markov Regime Switching ........................................................................55
Hiroshi Yamamoto, Chie Hidano, Shigehiro Ano, and Katsuyuki Yamazaki
Toy Block Networking: Easily Deploying Diverse Network Functions in Programmable Networks ..............................................................................61
Masaki Fukushima, Yoshiaki Yoshida, Atsushi Tagami, Shu Yamamoto, and Akihiro Nakao
Bridging the Gap between Low-Level Network Traffic Data Acquisition and Higher-Level Frameworks ................................................................. 67
   Ruediger Gad, Martin Kappes, and Inmaculada Medina-Bulo
A Mobility Management System for the Global Live Migration of Virtual Machine across Multiple Sites ................................................................. 73
   Tohru Kondo, Reiji Aibara, Kazufumi Suga, and Kaori Maeda

Cloud and Security
Implementation and Evaluation of Secure Outsourcing Scheme for Secret Sharing
Scheme on Cloud Storage Services .............................................................................................................................................................. 78
   Toshihiro Ohigashi, Kouji Nishimura, Reiji Aibara, and Kouta Yoshida
Deploying OpenStack: Virtual Infrastructure or Dedicated Hardware ............................................................................................................. 84
   Robayet Nasim and Andreas J. Kassler
A Technique to Assign an Appropriate Server to a Client, for a CDN Consists of Servers at the Global Internet and Hierarchical Private Networks ..................................................................................................................... 90
   Takashi Yamanoue, Yuuri Koarata, Kentaro Oda, and Koichi Shimoizono

Management
Computer Ethics Video Clips for University Students in Japan from 2003 until 2013 ........................................................................... 96
   Takashi Yamanoue, Izumi Fuse, Shigeto Okabe, Atsushi Nakamura, Michio Nakanishi, Shozo Fukada, Takahiro Tagawa, Tatsumi Takeo, Ikuya Murata, Tetsutarou Uehara, Tsuneo Yamada, and Hiroshi Ueda

STPSA 2014: Ninth IEEE International Workshop on Security, Trust, and Privacy for Software Applications

Security and Analysis
Static Code Analysis for Software Security Verification: Problems and Approaches ..................................................................................................................... 102
   Zeineb Zhioua, Stuart Short, and Yves Roudier
Security by Design for the Smart Grid: Combining the SGAM and NISTIR 7628 ................................................................................................. 110
   Mathias Uslar, Christine Rosinger, and Stefanie Schlegel
Introducing Code Assets of a New White-Box Security Modeling Language .......................................................................................................... 116
   He Sun, Lin Liu, Letong Feng, and Yuan Xiang Gu
A Security Oriented Design (SOD) Framework for eHealth Systems ........................................................................................................................... 122
   Weider D. Yu, Lavanya Davuluri, Monica Radhakrishnan, and Maryam Runiassy

Cyber Security, Detection, and Modeling
Bayesian Model Averaging of Bayesian Network Classifiers for Intrusion Detection .............................................................................................. 128
   Liyuan Xiao, Yetian Chen, and Carl K. Chang
DCAFE: A Distributed Cyber Security Automation Framework for Experiments .................................................................................................. 134
   George Rush, Daniel R. Tauritz, and Alexander D. Kent
Quantification of Information Flow in a Smart Grid ................................................................. 140
   Li Feng and Bruce McMillin

Access Control, Privacy, and Process
A Privacy-Preserving Solution for Tracking People in Critical Environments .............................................. 146
   Francesco Buccafurri, Gianluca Lax, Serena Nicolazzo, and Antonino Nocera
Access Control Model for the My Number National Identification Program in Japan ........................................ 152
   Miyata Sumiko, Suzuki Kazuhiro, Morizumi Tetsuya, and Kinoshita Hirotsgu
Improvement of the Integrity Verification Application Using Timestamp Mechanism
for Distributed File System ......................................................................................................................... 158
   Hidenobu Watanabe, Tsukasa Iwama, Ken. T. Murata, Shigenori Ushiyama, and Yasushi Moto
Secret Key Steganography with Message Obfuscation by Pseudo-random Number
Generators ........................................................................................................................................ 164
   Juan M. Gutiérrez-Cárdenas

MidArch 2014: Eighth IEEE International Workshop on Middleware Architecture in the Internet
Certificate-Based, Disruption-Tolerant Authentication System with Automatic CA
Certificate Distribution for Eduroam .............................................................................................................. 169
   Hao Liu and Hideaki Goto
Centralized Online Sign-Up and Client Certificate Issuing System for Eduroam ................................................ 174
   Tomo Niizuma and Hideaki Goto
Modeling the Cost Structure of Identity Proofing ....................................................................................... 180
   Masaki Shimaoka and Noboru Sonehara
Dripcast—Server-less Java Programming Framework for Billions of IoT Devices ....................................................... 186
   Ikuo Nakagawa, Masahiro Hiji, and Hiroshi Esaki
The Concept of a Mobility Data Cloud: Design, Implementation and Trials .................................................... 192
   Nikolay Tcholtchev, Benjamin Dittwald, Thomas Scheel, Begüm İlke Zilci, Danilo Schmidt, Philipp Lämmel, Jurina Jacobsen, and Ina Schieferdecker
Big Data in Memory: Benchmarking in Memory Database Using the Distributed
Key-Value Store for Constructing a Large Scale Information Infrastructure .................................................. 199
   Michiaki Iwazume, Takahiro Iwase, Kouji Tanaka, and Hideaki Fujii

WRMOCC 2014: First IEEE International Workshop on Risk Management of OSS Components and Communities
Expert Mining for Evaluating Risk Indicators Scenarios .............................................................................. 205
   Oscar Franco-Bedoya, Dolors Costal, Soraya Hidalgo, and Ron Ben-Jacob
Building a Community: The Moodbile Perspective ....................................................................................... 211
   Nikolas Galanis, María José Casany, Marc Aller, and Enric Mayol
Risk Measure Propagation through Organisational Network .................................................................... 217
   Luba Shabnam, Farzana Haque, Moshiur Bhuiyan, and Aneesh Krishna
SocNet 2014: First IEEE International Workshop on Social Networks, Smart Communities, and Smart Devices

The Application of Internet of Things in Social Network .................................................................223
Yu Zhang, Jiangtao Wen, and Fan Mo

Cross-Domain Scientific Collaborations Prediction with Citation Information ........................................229
Ying Guo and Xi Chen

An Enterprise Social Recommendation System for Connecting Swedish Professionals .......................234
Nima Dokoohaki, Mihhail Matskin, Usman Afzal, and Md. Mustakimul Islam

How Overlapping Community Structure Affects Epidemic Spreading in Complex Networks ..................240
Jiaxing Shang, Lianchen Liu, Feng Xie, and Cheng Wu

UCDAS 2014: First IEEE International Workshop on User Centered Design and Adaptive Systems

Automated Generation of User-Interface Prototypes Based on Controlled Natural Language Description ..................................................246
Reyes Juárez-Ramírez, Carlos Huertas, and Sergio Inzunza

Exploiting Reinforcement Learning to Profile Users and Personalize Web Pages ..................................252
Stefano Ferretti, Silvia Mirri, Catia Prandi, and Paola Salomoni

Physiological Mouse: Towards an Emotion-Aware Mouse ................................................................258
Yujun Fu, Hong Va Leong, Grace Ngai, Michael Xuelin Huang, and Stephen C.F. Chan

Towards a User Model for the Design of Adaptive Interfaces for Autistic Users .........................................264
Andrés Mejía Figueroa and Reyes Juárez-Ramírez

Text-Based CAPTCHA Using Phonemic Restoration Effect and Similar Sounds ..................................270
Misako Goto, Toru Shirato, and Ryuya Uda

Improvement of Personal Identification by Flick Input with Acceleration Sensor ..................................276
Nozomi Takeuchi, Shuhei Kobata, and Ryuya Uda

Designing Interpersonal Communication Software for the Abilities of Elderly Users ...............................282
Drew Williams, Sheikh Iqbal Ahamed, and William Chu

BIoT 2014: First IEEE International Workshop on Big Data Management for the Internet of Things

Designing of a Network-Aware Cloud Robotic Sensor Observation Framework ......................................288
Fredrik Nordlund, Manabu Higashida, Yuuichi Teranishi, Shinji Shimojo, Masanori Yokoyama, and Michio Shimomura

Managing Heterogeneous Sensor Data on a Big Data Platform: IoT Services for Data-Intensive Science ..................................................295
Sulayman K. Sowe, Takashi Kimata, Mianxiong Dong, and Koji Zettsu

m-cloud—Distributed Statistical Computation Using Multiple Cloud Computers ..................................301
Ikuo Nakagawa, Masahiro Hiji, Yutaka Kikuchi, Masahiro Fukumoto, and Shinji Shimojo
Facility Information Management on HBase: Large-Scale Storage for Time-Series Data ........................................306
   Hideya Ochiai, Hiroyuki Ikegami, Yuichi Teranishi, and Hiroshi Esaki

Towards a User-Friendly Loading System for the Analysis of Big Data in the Internet of Things .................................................................312
   Marco Mesiti and Stefano Valtolina

Load-Adaptive Indexing Method for Schema-less Searches ......................................................................................318
   Yutaka Arakawa, Takayuki Nakamura, Motonori Nakamura, Nobuhiko Matsuura, Yuusuke Kawakita, and Haruhsa Ichikawa

CFSE 2014: Sixth IEEE International Workshop on Computer Forensics in Software Engineering
Digital Fingerprinting on Executable File for Tracking Illegal Uproaders .................................................................325
   Masayuki Tsubouchi, Tomotaka Maeda, and Yasuo Okabe

An Evaluation of Side-Information Assisted Forensic Hash Matching ........................................................................331
   Johan Garcia

Evolving Decision Trees for the Categorization of Software .........................................................................................337
   Jasenko Hosic, Daniel R. Tauritz, and Samuel A. Mulder

Proposal and Evaluation of Safe and Efficient Log Signature Scheme for the Preservation of Evidence .................................................................343
   Naoki Kobayashi and Ryoichi Sasaki

ESAS 2014: Ninth IEEE International Workshop on Engineering Semantic Agents—Semantics, Agents and Intelligence
A Safety Food Consumption Mobile System through Semantic Web Technology .................................................................348
   Duygu Çelik, Atilla Elçi, Ridvan Akçiçek, Bora Gökçe, and Pelin Hürcken

Mobile Pediatric Consultation and Monitoring System through Semantic Web Technology .................................................................354
   Duygu Çelik, Atilla Elçi, Ridvan Akçiçek, Bora Gökçe, and Pelin Hürcken

Using the Semantics Inherent in Sitemaps to Learn Ontologies ....................................................................................360
   Abdulelah A. Algosaibi and Austin C. Melton

CORCS-IEESD 2014: Fifth IEEE International Workshop on Component-Based Design of Resource Constrained Systems
Synthesis of Pareto Efficient Technical Architectures for Multi-core Systems .................................................................366
   Sergey Zverlov and Sebastian Voss

Towards Context-Oriented Self-Adaptation in Resource-Constrained Cyberphysical Systems .................................................................372
   Mikhail Afanasov, Luca Mottola, and Carlo Ghezzi

Towards a Common Software-to-Hardware Allocation Framework for the Heterogeneous High Performance Computing .................................................................378
   Zdravko Krpić, Ivica Cmoković, and Jan Carlson
Identifying Evolution Problems for Large Long Term Industrial Evolution Systems ....................................................384
  Daniel Hallmans, Marcus Jägemar, Stig Larsson, and Thomas Nolte

Variable Factors of Influence in Product Line Development ........................................................................................................390
  Franz Felix Füssl and Jirka Ciemala

**SAPSE 2014: Sixth IEEE International Workshop on Security Aspects in Processes and Services Engineering**

The Problem of Handling Multiple Headers in WS-Security Implementations ...............................................................................396
  Ernesto Damiani, Valerio Coviello, Fulvio Frati, and Claudio Santacesaria

A Socio-technical Methodology for the Security and Privacy Analysis of Services .................................................................401
  Giampaolo Bella, Paul Curzon, Rosario Giustolisi, and Gabriele Lenzini

I Was Confused: Robust Accountability for Permission Delegation in Cloud Federations ........................................................407
  Samane Abdi

Integration of Heterogeneous Policies for Trust Management .................................................................................................413
  Samane Abdi

**SSERV 2014: First IEEE International Workshop on Social Services through Human and Artificial Agent Models**

What Is the Impact of Heterogeneous Knowledge about Fundamentals on Market Liquidity and Efficiency: An ABM Approach ........................................................................................................420
  Vivien Lespagnol and Juliette Rouchier

A Study on Filtering of the Effect Range with the Package Insert of the Medicine ..................................................................426
  Takashi Ikoma, Masakazu Takahashi, and Kazuhiko Tsuda

Learning Agents for Human Complex Systems .........................................................................................................................432
  Iris Lorscheid

Heuristics for Designing and Evaluating Socio-technical Agent-Oriented Behaviour Models with Coloured Petri Nets ................................................................................................................438
  Msury Mahunnah, Alex Norta, Lixin Ma, and Kuldar Taveter

Analyzing the Role of Noise Trader in Financial Markets through Agent-Based Modelling .................................................................................444
  Hiroshi Takahashi

Emergence of Fashion Cycle by Agent-Based Model of WoM Dissemination ........................................................................450
  Takashi Yoshida and Setsuya Kurahashi

Chartists and Fundamentalists in an Agent Based Herding Model ..........................................................................................456
  Souhir Masmoudi

Heterogeneity in Lowest Unique Integer Game ...................................................................................................................462
  Takashi Yamada and Nobuyuki Hanaki
QUORS 2014: Eighth IEEE International Workshop on Quality Oriented Reuse of Software

Software Evolution
A Multi-dimensional Component Importance Analysis Mechanism for Component Based Systems .......................................................... 468
    Xin Zhang
A SysML Based Requirement Modeling Automatic Transformation Approach .......................................................... 474
    Chih-Hung Chang, Chih-Wei Lu, Wen Pin Yang, William Cheng-Chung Chu, Chao-Tung Yang, Ching-Tseng Tsai, and Pao-Ann Hsiung
Analyzing Artifact Anomalies in a Temporal Structural Workflow for SBS .......................................................... 480
    Feng-Jian Wang and Parameswaran Mandalapu

Software Reuse
A Framework of Patterns Applicability in Software Development .......................................................... 486
    Hossam Hakeem, Hui Guan, and Hongji Yang
Reverse Engineering Web Applications for Security Mechanism Enhancement .......................................................... 492
    Hui Guan, Hongji Yang, and Hossam Hakeem
    Julia Varnell-Sarjeant, Anneliese Amschler Andrews, and Andreas Stefik
Modeling a Safety- and Automotive-Oriented Process Line to Enable Reuse and Flexible Process Derivation .......................................................... 504
    Barbara Gallina, Shaghayegh Kashiyarandi, Helmut Martin, and Robert Bramberger

Cloud and Service Computing
Critical Evaluation on jClouds and Cloudify Abstract APIs against EC2, Azure and HP-Cloud .......................................................... 510
    Steven Thomas Graham and Xiaodong Liu
Institution Theory for Services Oriented Applications .......................................................... 516
    Amine Achouri, Yousra Bendaly Hlaoui, and Leila Jemni Ben Ayed

Model-Driven Quality and Testing
Towards Feature-Oriented Fault Tree Analysis .......................................................... 522
    Benjamin Behringer, Martina Lehser, and Steffen Rothkugel
Integrating the Modelica DSL into a Platform for Model-Based Tool Interoperability .......................................................... 528
    Nikolay Tcholtchev, Grit Dudeck, Michael Wagner, Christian Hein, Arun Prakash, and Tom Ritter
Requirements Model Oriented System Generation Tool and Its Practical Evaluation .......................................................... 535
    Shinobu Saito, Jun Hagiwara, Tomoki Yagasaki, and Katsuyuki Natsukawa
Using TTCN-3 to Test SPDY Protocol Interaction Property .......................................................... 541
    Sumei Zhang, Hua Li, Yu Xue, and Xianrong Wang
CDS 2014: Second IEEE International Workshop on Consumer Devices and Systems

A Hazard Detection Method for Bicycles by Using Probe Bicycle .................................................................547
Shigeo Kaneda, Shohei Asada, Akira Yamamoto, Yuta Kawachi, and Yusuke Tabata

An Ironing Support System with Superimposed Information for Beginners ..................................................552
Kimie Suzuki and Kaori Fujinami

A Hybrid Device Profile Detection Method and Its Applications .....................................................................558
Naofumi Yoshida, Naoki Ishibashi, and Norihiro Ishikawa

A Study of On-Vehicle Information Devices Using a Smartphone .................................................................561
Takatomo Yamabe and Ryozo Kiyohara

An API Design Process in Terms of Usability: A Case Study on Building More Usable APIs for Smart TV Platform ........................................................................................................................................567
Sunghoon Lee, Sanghee Lee, Sumi Lim, Jiyoun Jung, Sangho Choi, Neunghoe Kim, and Jung-Been Lee

Design and Implementation of Event Information Summarization System ......................................................572
Chenyi Liao, Katsuhiko Kaji, Kei Hiroi, and Nobuo Kawaguchi

Metadata for Energy Disaggregation ..................................................................................................................578
Jack Kelly and William Knottenbelt

Customizable Web-Based System to Federate Smart Devices and Peripherals ..................................................584
Hidenobu Ito and Kazuaki Nimura

A Power Allocation Management System Using an Algorithm for the Knapsack Problem ..............................590
Naoyuki Morimoto, Yuu Fujita, Masaaki Yoshida, Hiroyuki Yoshimizu, Masafumi Takiyamada, Terukazu Akehi, and Masami Tanaka

A Rapid Prototyping Approach for Smart Energy Systems Based on Partial System Models .................................................................596
Georg Hackenberg, Maximilian Irlbeck, Vasileios Koutsoumpas, and Denis Bytschkow

WASCOM 2014: First IEEE International Workshop on Adaptive Systems for Communication Networks

Dynamic Adaptive Management of Buffer for QoS Guarantees and Energy Reduction ..................................602
Wael Zouaoui, Carolina Albea-Sanchez, and Yann Labit

Profile-Based Scalable Video Adaptation Employing MD-FEC Interleaving over Loss-Burst Channels .................608
Sheau-Ru Tong, Huan-Wen Chen, and Cheng-Han Yang

An Evaluation of Adaptive Traffic Engineering for Delivering High Bandwidth Movie on Overlay Routing Network ..........................................................................................................................614
Hiroki Kashiwazaki and Yoshiaki Takai

An Adaptive XACMLv3 Policy Enforcement Point ..............................................................................................620
Romain Laborde, Bashar Kabbani, François Barrère, and Abdelmalek Benzekri
STA 2014: Sixth IEEE International Workshop on Software Test Automation

Instrumentation, Automation, and Applications

Testing Java Exceptions: An Instrumentation Technique ..........................................................626
  Alexandre L. Martins, Simone Hanazumi, and Ana C.V. de Melo

Automated Generation of Integration Test Sequences from Logical Contracts ................................632
  Dianxiang Xu, Weifeng Xu, and Manghui Tu

Risk Based Testing of Open Source Software (OSS) ..........................................................638
  Inbal Yahav, Ron S. Kenett, and Xiaoying Bai

Model-Based Testing—Improving and Extending

Automated Model-Based Performance Testing for PaaS Cloud Services ....................................644
  Junzan Zhou, Bo Zhou, and Shanping Li

A Structured Model of Consistency Rules in After-State Database Testing ..................................650
  Robert Setiadi and Man Fai Lau

Improving Models for Model-Based Testing Based on Exploratory Testing ...............................656
  Ceren Sahin Gebizli and Hasan Sözer

SSS 2014 and MediComp 2014: Seventh IEEE International Workshop on Service Science and Systems and First IEEE International Workshop on Medical Computing

Noninvasive Ambulatory Monitoring of the Electric and Mechanical Function of Heart
  with a Multifunction Wearable Sensor .....................................................................................662
  Xianxiang Chen, Xinyu Hu, Ren Ren, Bing Zhou, Xiao Tan, Jiabai Xie, Zhen Fang,
  Yangmin Qian, Huaiyong Li, Lili Tian, and Shanhong Xia

Current Electronic Medical Record in China ...........................................................................668
  Chen Shi, Liu Hui-Ting, Pan Hui, Ji-Jiang Yang, Jianqiang Li, and Qing Wang

A ZigBee Based Multi-hop Health Monitoring System: Design and Performance
  Evaluation .................................................................................................................................673

Using Knowledge Management and Mhealth in High-Risk Pregnancy Care: A Case
  for the Floating Population in China .....................................................................................678
  Ben-Da Gu, Ji-Jiang Yang, Jian-Qiang Li, Qing Wang, and Yu Niu

A Practical and Automated Approach for Engineering Service-Oriented Applications
  with Design Patterns ...............................................................................................................684
  Patrizia Scandurra and Steven Capelli

Measuring Prediction Sensitivity of a Cloud Auto-scaling System .............................................690
  Ali Yadavar Nikravesh, Samuel A. Ajila, and Chung-Horng Lung

Towards an Ontology-Based Context-Aware Meta-model for the Software Domain .....................696
  Mostafa Erfani, Juergen Rilling, and Iman Keivanloo
Accountability in a Context-Aware SmartHome Healthcare Reasoning System ........................................702
   Bingchuan Yuan and John Herbert

MVDA 2014: Third IEEE International Workshop on Modeling and Verifying of Distributed Applications

MuScADeL: A Deployment DSL Based on a Multiscale Characterization Framework .........................................708
   Raja Boujbel, Sam Rottenberg, Sébastien Leriche, Chantal Taconet,
   Jean-Paul Arcangeli, and Claire Lecocq

A Load Distribution Method Based on Distributed Hashing for P2P Sensor Data Stream Delivery System .................................................................716
   Tomoya Kawakami, Yoshimasa Ishi, Tomoki Yoshihisa, and Yuuichi Teranishi

A Calculus for Transportation Systems ........................................................................................................722
   Moonkun Lee and Jungrhan Choi

Towards an Institutional Representation for the B Model Oriented Specification ...............................................728
   Amine Achouri, Yousra Bendaly Hlaoui, and Leila Jemni Ben Ayed

A Formal Modeling for Exceptions in Context-Aware Systems ..........................................................................734
   Tae-Seob Yoon, Joong-Hyun Choi, Eun-Sun Cho, and Sumi Helal

A Meta-model Transformation from UML Activity Diagrams to Event-B Models ........................................740
   Ahlem Ben Younes, Yousra Bendaly Hlaoui, and Leila Jemni Ben Ayed

Author Index ....................................................................................................................................................746