PROGRAM GUIDE

CISIS-2017

The 11-th International Conference on
Complex, Intelligent, and Software Intensive Systems

and

IMIS-2017

The 11-th International Conference on
Innovative Mobile and Internet Services in Ubiquitous Computing

July 10th - July 12th, 2017

Istituto Superiore Mario Boella (ISMB), Torino, Italy

Technically Co-sponsored by:

FIT Fukuoka Institute of Technology 福岡工業大学

I S M B
Istituto Superiore Mario Boella

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Welcome Message from CISIS-2017 International Conference Organizers

Welcome to the 11-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2017), which will be held from July 10-th to July 12-th, 2017, at Istituto Superiore Mario Boella (ISMB), Torino, Italy in conjunction with the 11-th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS-2017).

The aim of the conference is to deliver a platform of scientific interaction between the three interwoven challenging areas of research and development of future ICT-enabled applications: Software Intensive Systems, Complex systems and Intelligent Systems.

Software Intensive Systems are systems, which heavily interact with other systems, sensors, actuators, devices, other software systems and users. More and more domains are involved with software intensive systems, e.g. automotive, telecommunication systems, embedded systems in general, industrial automation systems and business applications. Moreover, the outcome of web services delivers a new platform for enabling software intensive systems. The conference is thus focused on tools, practically relevant and theoretical foundations for engineering software intensive systems.

Complex Systems research is focused on the overall understanding of systems rather than its components. Complex Systems are very much characterized by the changing environments in which they act by their multiple internal and external interactions. They evolve and adapt through internal and external dynamic interactions.

The development of Intelligent Systems and agents, which is each time more characterized by the use of ontologies and their logical foundations build a fruitful impulse for both Software Intensive Systems and Complex Systems. Recent research in the field of intelligent systems, robotics, neuroscience, artificial intelligence, and cognitive sciences are very important factor for the future development and innovation of software intensive and complex systems.

The CISIS-2017 is aiming at delivering a forum for in-depth scientific discussions amongst the three communities. The papers included in the proceedings cover all aspects of theory, design and application of complex systems, intelligent systems and software intensive systems. The conference received 170 papers and accepted 43 papers (about 25% acceptance rate), which were selected after a careful review process.

We are very proud and honored to have 2 distinguished keynote talks by Dr. Sven Helmer, Free University of Bozen-Bolzano, Italy and Dr. Patrick Demichel, Hewlett Packard, France, who will present their recent work and will give new insights and ideas to the conference participants.

The organization of an International Conference requires the support and help of many people. A lot of people have helped and worked hard to produce a successful CISIS-2017 technical program and conference proceedings. First, we would like to thank all the authors for submitting their papers, the Program Committee Members, and the reviewers who carried out the most difficult work by carefully evaluating the submitted papers.

We are grateful to Honorary Co-Chairs Prof. Makoto Takizawa, Hosei University, Japan and Dr. Paolo Mulassano, Istituto Superiore Mario Boella, Italy for their guidance and advices.

This year in conjunction with CISIS-2017 we have 8 International Workshops that complemented CISIS-2017 program with contributions for specific topics. We would like to thank the Workshop Co-Chairs and all workshops organizers for organizing these workshops.

We thank Shinji Sakamoto, Donald Elmazi and Yi Liu, Fukuoka Institute of Technology, Japan as Web Administrators for their excellent and timely work.

Finally, we would like to thank the Local Arrangement team of ISMB for their support and good local arrangement for the conference.

We hope you will enjoy the conference and have a great time in Torino, Italy.

CISIS-2017 General Co-Chairs

Leonard Barolli, *Fukuoka Institute of Technology (FIT), Japan*
Olivier Terzo, *Istituto Superiore Mario Boella, Italy*

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Lorenzo Mossucca, *Istituto Superiore Mario Boella, Italy*
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Welcome Message from CISIS-2017 Workshops Co-Chairs

Welcome to the Workshops of the 11-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2017), which will be held from July 10-th to July 12-th, 2017 at Istituto Superiore Mario Boella (ISMB), Torino, Italy.

We are pleased that for this edition of CISIS International Conference we have 8 International Workshops. Some of these workshops are in 7-th, 8-th 9-th, 10-th and 11th editions. The objective was to complement as much as possible the main theme of CISIS-2017 with specific topics of different workshops in order to cover topics from the three challenging areas of ICT-enabled applications: Software Intensive Systems, Complex Systems and Intelligent Systems.

The list of workshops is as follows.

1. The 11-th International Workshop on Engineering Complex Distributed Systems (ECDS-2017)

2. The 10-th International Workshop on Engineering Parallel and Multi-Core Systems (ePaMus-2017)

3. The 10-th International Workshop on Intelligent Informatics and Natural Inspired Computing (IINIC-2017)

4. The 8-th International Workshop on Frontiers on Complex, Intelligent and Software Intensive Systems (FCISIS-2017)

5. The 8-th International Workshop on Virtual Environment and Network-Oriented Applications (VENOA 2017)

6. The 7-th Semantic Web/Cloud Information and Services Discovery and Management (SWISM-2017)

7. The 7-th International Workshop on Intelligent Computing In Large-Scale Systems (ICLS-2017)

8. The 4-th International WorkShop on Energy-Aware Systems, Communications and Security (EASyCoSe-2017)

These workshops bring to the researchers conducting research in specific themes the opportunity to learn from this rich multi-disciplinary experience. The Workshop Co-Chairs would like to thank CISIS-2017 International Conference Organizers for their help and support. We are grateful to the workshops organizers for their great efforts and hard work in proposing the workshops, selecting the papers, the interesting programs and for the arrangements of the workshops during the conference days. We are grateful to Shinji Sakamoto, Donald Elmazi and Yi Liu, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators. We would like to give special thanks to the Local Organization Team of ISMB, Torino, Italy.

We hope you enjoy the workshops program and proceedings.

Workshops Co-Chairs of CISIS-2017 International Conference

Makoto Ikeda, *Fukuoka Institute of Technology (FIT), Japan*
Farookh Hussain, *University Technology Sidney, Australia*
Giuseppe Caragnano, *Istituto Superiore Mario Boella, Italy*

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Web Administrator Chairs

Shinji Sakamoto, *Fukuoka Institute of Technology, Japan*

Donald Elmazi, *Fukuoka Institute of Technology, Japan*

Yi Liu, *Fukuoka Institute of Technology, Japan*

Welcome Message of IMIS-2017 International Conference Organizers

Welcome to the 11-th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS-2017), which will be held from July 10-th to July 12-th, 2017, at Istituto Superiore Mario Boella (ISMB), Torino, Italy in conjunction with the 11-th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2017).

This International Conference focuses on the challenges and solutions for Ubiquitous and Pervasive Computing (UPC) with an emphasis on innovative, mobile and internet services. With the proliferation of wireless technologies and electronic devices, there is a fast growing interest in UPC. UPC enables to create a human-oriented computing environment where computer chips are embedded in everyday objects and interact with physical world. Through UPC, people can get online even while moving around, thus having almost permanent access to their preferred services. With a great potential to revolutionize our lives, UPC also poses new research challenges. The conference provides an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of UPC.

For IMIS-2017, we received many paper submissions from all over the world. The papers included in the proceedings cover important aspects from UPC research domain. This year, we received 141 submissions and after a careful review process of 3 independent reviews per submission, 38 papers were accepted (about 27% acceptance rate).

It is impossible to organize such a successful program without the help of many individuals. We would like to express our great appreciation to the authors of the submitted papers, the program committee members, who provided timely and significant reviews, and special session chairs for their great efforts. We are grateful to Honorary Co-Chairs: Prof. Makoto Takizawa, Hosei University, Japan and Mr. Massimo Marcarini, Istituto Superiore Mario Boella, Italy for their advices and support.

This year in conjunction with IMIS-2017 we have 8 International Workshops that complemented IMIS-2017 program with contributions for specific topics. We would like to thank the Workshop Co-Chairs and all workshop organizers for organizing these workshops.

We thank Shinji Sakamoto, Donald Elmazi and Yi Liu, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators.

Finally, we would like to thank the members of the Local Arrangement Team of ISMB for their support and good local arrangement for the conference.

We hope that all of you enjoy IMIS-2017 and find this a productive opportunity to learn, exchange ideas and make new contacts.

IMIS-2017 General Co-Chairs

Leonard Barolli, *Fukuoka Institute of Technology (FIT), Japan*
Olivier Terzo, *Istituto Superiore Mario Boella, Italy*

IMIS-2017 Program Committee Co-Chairs

Tomoya Enokido, *Rissho University, Japan*
Hae-Duck Joshua Jeong, *Korean Bible University, Korea*
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Welcome Message from IMIS-2017 Workshops Co-Chairs

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This year we have 8 workshops, which will be held together with IMIS-2017. The objective was to complement as much as possible the main themes of IMIS-2017 with the specific topics of the different workshops to cover many topics of Ubiquitous and Pervasive Computing (UPC).

The list of workshops follows below:

1. The 11-th International Workshop on Advances in Information Security (WAIS-2017)

2. The 7-th International Workshop on Mobile Commerce, Cloud Computing, Network and Communication Security (MCNCS-2017)

3. The 7-th International Workshop on Intelligent Techniques and Algorithms for Ubiquitous Computing (ITAUC-2017)

4. The 7-th international workshop on Future Internet and Next Generation Networks (FINGNet-2017)

5. The 6-th International Workshop on Frontiers in Innovative Mobile and Internet Services (FIMIS-2017)

6. The 6-th International Workshop on Sustainability Management of e-Business and Ubiquitous Commerce Engineering (SMEUCE-2017)

7. The 6-th International Workshop on Extending Seamlessly to the Internet of Things (esIoT-2017)

8. The 3-rd International Workshop on Big Data and IoT Security (BDITS-2017)

We would like to thank IMIS-2017 International Conference Organizers for their help and support. We are grateful to the workshop organizers for their great efforts and hard work in proposing the workshops, selecting the papers, organizing interesting programs, and for the arrangements of the workshops during the conference days.

We are grateful to Shinji Sakamoto, Donald Elamzi and Yi Liu, Fukuoka Institute of Technology, Japan for their excellent work and support as Web Administrators. We would also like to give special thanks to the Local Organization Team of ISMB, Torino, Italy. We hope you enjoy the workshops programs and proceedings.

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Workshops Co-Chairs of IMIS-2017 International Conference

Baojiang Cui, *Beijing Univ. of Posts and Telecom, China*
Antonio Jara, *HES-SO, Switzerland*
Alberto Scionti, *Istituto Superiore Mario Boella, Torino, Italy*

CISIS-2017 & IMIS-2017 Keynote I

Dr. Sven Helmer, Free University of Bozen-Bolzano, Italy

Raspberries on the Edge

Abstract: With the advent of the Internet of Things (IoT), billions of new devices will join the data networks, many of them generating data streams originating from sensors or other sources. Instead of pushing all this data to centralized (cloud) servers, it makes a lot of sense to preprocess, analyze, and aggregate it on site. This is the central idea of edge computing, reducing storage requirements for central servers, lowering the network load, and also decreasing reaction times for time-critical applications. Deploying the necessary infrastructure for edge computing is already a challenge in well-developed, urbanized settings, it is even harder to do so in harsh environments located in rural and remote areas. Platforms based on small single-board computers, such as Raspberry Pis, could ameliorate this situation by providing a solution with low costs and power consumption. In this keynote we look at some of the challenges faced by edge computing in general and also explore particular low-resource scenarios.

CISIS-2017 & IMIS-2017 Keynote II

Dr. Patrick Demichel, Hewlett Packard, France

The future of IT technologies

Abstract: Our society and industry are facing a large number of MegaTrends; the IIoT "Intelligent Internet of Things" and Machine Learning are some of the most promising. At the same time, we observe many signs that we are reaching some fundamental limits of our old technologies and infrastructures. Our labs demonstrated a decade ago that we have no choice but to implement a radical and holistic transformation, if we expect to reach the Exascale frontier at a reasonable power envelop. We anticipated also a set of news problems, like edge computing and its requirements in term of security. This large research program called "The Machine" is now entering its final development phase with a group of partners grouped in a consortium named "gen-Z" . We will explore what are the fundamental bricks enabling this historical evolution of our architectures. We will also consider some implications on how we could solve our most challenging problems in a short future; with a huge potentiality for the IIoT, Exascale and ML ecosystems.

CISIS-2017
Main Conference and Workshops Program

Monday, July 10, 2017

08:00 Registration

09:00-10:00 Single Session: Opening Ceremony and CISIS-2017 & IMIS-2017 Keynote I

CISIS-2017 & IMIS-2017 Keynote Talk I (PLENARY ROOM)

Dr. Sven Helmer: Raspberries on the Edge

10:00-10:30 Coffee Break

10:30-12:30 Parallel Sessions

CISIS-S1: Smart Grid and Energy Efficient Systems

Chair: Makoto Takizawa, Hosei University, Japan

1. An Efficient Scheduling of Electrical Appliance in Micro Grid based on Heuristic Techniques
   Sardar Mehboob Hussain, Ayesha Zafar, Rabiya Khalid, Samia Abid, Umar Qasim, Zahoor Ali Khan and Nadeem Javaid

2. Hardware Design of a Smart Meter Communication Interface for Smart Grids
   William Richard Kintzel, Mauro Marcelo Mattos, Altamir Rosani Borges

3. Energy-Efficient Quorum Selection Algorithm for Distributed Object-Based Systems
   Tomoya Enokido, Dilawaer Duolikun, and Makoto Takizawa

4. Managing Energy in Smart Homes using Binary Particle Swarm Optimization
   Samia Abid, Ayesha Zafar, Rabiya Khalid, Sakeena Javaid, Umar Qasim, Zahoor Ali Khan, Nadeem Javaid

5. Energy-aware Dynamic Migration of Virtual Machines in a Server Cluster
   Dilawaer Duolikun, Ryo Watanabe, Tomoya Enokido, and Makoto Takizawa

6. An Energy-efficient Migration Algorithm of Virtual Machines in Server Clusters
   Ryo Watanabe, Dilawaer Duolikun, Tomoya Enokido, and Makoto Takizawa

CISIS-S2: Semantic and Cloud Computing

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

1. BioGrakn: A Knowledge Graph-based Semantic Database for Biomedical Sciences
   Antonio Messina, Haikal Pribadi, Jo Stichbury, Michelangelo Bucci, Szymon Klarman, and Alfonso Urso

2. WORDY: a Semi-automatic Methodology aimed at the Creation of Neologisms based on a Semantic Network and Blending Devices
   Daniele Schicchi and Giovanni Pilato

3. Performance Analysis of WRF Simulations in a Public Cloud and HPC Environment
   Klodiana Goga, Antonio Parodi, Pietro Ruiu, Olivier Terzo

4. HyperLoom Possibilities for Executing Scientific Workflows on the Cloud
   Vojtech Cima, Stanislav Bohm, Jan Martinovic, Jirı Dvorsky, Thomas J. Ashby, and Vladimir Chupakhin

5. Enriching Remote Control Applications with Fog Computing
   Claudio Fiandrino, Paolo Giaccone, Ahsan Mahmood, and Luca Maioli

VENOA-S1: Innovative Systems and Applications I

Chair: Hiroaki Nishino, Oita University, Japan

1. A Parameter Optimization Tool and Its Application to Throughput Estimation Model for Wireless LAN
   Nobuo Funabiki, Chihiro Taniguchi, Kyaw Soe Lwin, Khin Khin Zaw and Wen-Chung Kao

2. Creating Learning Materials by Learners Themselves using Partial Bookmarking for Web Curation
   Takehiro Nagatomo, Takahiro Tachibana, Keizo Sato, and Makoto Nakashima

3. 3D Model Generation of Cattle Using Multiple Depth-Maps for ICT Agriculture
   Naoto Maki, Shohei Nakamura, Shigeru Takano, Yoshihiro Okada

4. The Ubiquitous Greenhouse for Technology Education in Junior High School
   Kazuaki Yoshihara, Kiko Fujimori, Kenzi Watanabe

ECDS-S1: Complex Distributed Systems

Chair: Takahiro Uchiya, Nagoya Institute of Technology, Japan

1. Dynamic MAC Protocol Designed for UAV Collision Avoidance System
   Xiao Ou Song

2. A Method for Estimating the Camera Parameters based on Vanishing Points
   Wan Fang, Li HaiNing, Jin HuaZhong, Lei GuangBo, Ruan Ou

3. Research and Construction of the Full-Service IP High-Speed Intelligent Bearer Network for the Digital Oil Field
   Xian Zhang, YuMin Feng , XiaoHui Song

4. Verification Using Multi-Agent Simulation for Evacuation Guidance with Robots
   Ryuta Sugie, Takahiro Uchiya, Ichi Takumi

5. Development Support Mechanism for Deep Learning Agent on DASH Agent Framework
   Kento Watanabe, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita

12:30-14:00 Lunch Break

14:00-16:00 Parallel Sessions

CISIS-S3: Artificial Intelligence and Bio-Inspired Computing

Chair: Salvatore Vitabile, University of Palermo, Italy

1. Conveying Audience Emotions through Humanoid Robot Gestures to an Orchestra During a Live Musical Exhibition
   Marcello Giardina, Salvatore Tramonte, Vito Gentile, Samuele Vinanzi, Antonio Chella, Salvatore Sorce, and Rosario Sorbello

2. A Kernel Support Vector Machine Based Technique for Crohn's Disease Classification in Human Patients
   Albert Comelli, Maria Chiara Terranova, Laura Scopelliti, Sergio Salerno, Federico Midiri, Giuseppe Lo Re, Giovanni Petrucci and Salvatore Vitabile

3. Real-time Body Gestures Recognition using Training Set Constrained Reduction
   Fabrizio Milazzo, Vito Gentile, Antonio Gentile and Salvatore Sorce

4. Selection of Actor Nodes in Wireless Sensor and Actor Networks: A Fuzzy-based System Considering Packet Error Rate as a New Parameter
   Donald Elmazi, Miralda Cuka, Tetsuya Oda, Elis Kulla, Makoto Ikeda, Leonard Barolli

5. A Fuzzy-based Approach for Improving Team Collaboration in MobilePeerDroid Mobile System
   Yi Liu, Kosuke Ozera, Keita Matsuo, Makoto Ikeda and Leonard Barolli

CISIS-S4: Algorithms and Systems for Next Generation Networks

Chair: Tomoya Enokido, Rissho University, Japan

1. Flexible Synchronization Protocol to Prevent Illegal Information Flow in Peer-to-Peer Publish/Subscribe Systems
   Shigenari Nakamura, Lidia Ogiela, Tomoya Enokido, and Makoto Takizawa

2. Security Infrastructure for Service Oriented Architectures at the Tactical Edge
   Vasileios Gkioulos and Stephen D. Wolthusen

3. Single Hop Selection based Forwarding in WDFAD-DBR for Under Water Wireless Sensor Networks
   Zaheer Ahmad, Arshad Sher, Saba Gull, Farwa Ahmed, Umar Qasim, Zahoor Ali Khan and Nadeem Javaid

4. Personal Data in Cyber Systems Security
   Marek R. Ogiela, Lidia Ogiela

5. A Framework for Ranking of Software Design Patterns
   Shahid Hussain, Jacky Keung, Arif Ali Khan

VENOA-S2: Network Infrastructure and Applications

Chair: Hiroaki Nishino, Oita University, Japan

1. Virtual IP Network Practice System with Software Agent
   Nobukazu Iguchi

2. Autonomous Decentralized System for Knowledge Refinement of Contents Published over Networks
   Takuma Horiuchi and Shinji Sugawara

3. Realizing Diverse Services over Hyper-converged Boxes with SmartX Automation Framework
   JongWon Kim

4. Performance Testing of Mass Distributed Abyss Storage Prototype for SMB
   ByungRae Cha, YoonSeok Cha, Sun Park and JongWon Kim

5. A Device Status Visualization System Based on Mobile Markerless AR Technology
   Toshiyuki Haramaki, Hiroaki Nishino

FCISIS-S1: Complex Intelligent and Software Intensive Systems

Chair: Fatos Xhafa, Technical University of Catalonia, Spain

1. Distinguishing Property for Full Round K ECCAK -f Permutation
   Maolin Li, Lu Cheng

2. Optimal Control of Carrier-based Aircraft Steam Launching Valve
   Chengtao Cai, Yujia Cui, Yanhua Liang

3. Design and Implementation of Food Safety Traceability System Based on RFID Technology
   Jie Ding, He Xu, Peng Li, Runyu Xie

4. PaEffExtr: A Method to Extract Effect Statements Automatically from Patents
   Deng Na, Chen Xu, Ruan Ou, Wang Chunzhi, Ye Zhiwei, Tian Jingbai

5. An Efficient Data Aggregation Scheme in Privacy-Preserving Smart Grid Communications with a High Practicability
   Bofeng Pan, Peng Zeng and Kim-Kwang Raymond Choo

6. A Hot Area Mobility Model for Ad Hoc Networks Based on Mining Real Traces of Human
   Lingyun Jiang, Fan He, Zhiqiang Zou, Zhengyuan Wang, Lijuan Sun

16:00-16:30 Coffee Break

16:30-18:30 Parallel Sessions

CISIS-S5: Multimedia Systems and Web Computing

Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan

1. On the Design of a System to Predict Student's Success
   David Bañeres, Montse Serra

2. Performance Evaluation of a Vegetable Recognition System Using Caffe and Chainer
   Makoto Ikeda, Yuki Sakai, Tetsuya Oda and Leonard Barolli

3. Using the Web of Data in Semantic Sensor Networks
   Cristian Lai, Antonio Pintus, and Alberto Serra

4. DoppioGioco. Playing with the Audience in an Interactive Storytelling Platform
   Rossana Damiano, Vincenzo Lombardo and Antonio Pizzo

5. Monitoring Health of Large Scale Software Systems using Drift Detection Techniques
   L. H. C. Prabodha, W. R. R.Vithanage, L. T. Ranaweera, D. M. M. A. I. B.Dissanayake, S. Ranathunga

CISIS-S6: Optimization and Modeling of Complex Systems

Chair: Alfredo Cuzzocrea, University of Trieste, Italy

1. An Application Using a BLE Beacon Model Combined with Fully Autonomous Wheelchair Control
   Shugo Miyamoto, Takamasa Koshizen, Takanari Matsumoto, Hiroaki Kawase, Makoto Higuchi, Yasuo Torimoto, Koji Uno, Fumiaki Sato

2. UnipaBCI a Novel General Software Framework for Brain Computer Interface
   Salvatore Tramonte, Rosario Sorbello, Marcello Giardina, and Antonio Chella

3. XML-VM: An XML-Based Grid Computing Middleware
   Alfredo Cuzzocrea, Enzo Mumolo, Marco Tessarotto

4. Intelligent Sensor Data Fusion for Supporting Advanced Smart Health Processes
   Alfredo Cuzzocrea, Fernando Ferri, Patrizia Grifoni

5. Towards Better Population Sizing for Differential Evolution through Active Population Analysis with Complex Network
   Adam Viktorin, Roman Senkerik, Michal Pluhacek, Tomas Kadavy

VENOA-S3: Innovative Systems and Applications II

Chair: Hiroaki Nishino, Oita University, Japan

1. Photo Alive!: Elderly Oriented Social Communication Service
   Masooma Zehra Syeda, Meeree Park, Yong-Moo Kwon

2. Study on Data Utilization of Regional Industry in Cross-cutting and Systematic Regional Community Networks
   Eiji Aoki, Zenjiro Oba, Ritsuko Watanabe

3. Log Data Visualization and Analysis for Supporting Medical Image Diagnosis
   Tsuneo Kagawa, Shuichi Tanoue and Hiroaki Nishino

4. A Color Scheme Explorer Based on a Practical Color Design Framework
   Satoru Miura, Hiroaki Nishino

ICLS-S1: Intelligent Computing

Chair: Flora Amato, University of Naples Federico II, Italy

1. On Context-Aware Evidence-Based Data Driven Development of Diagnostic Scales for Depression
   Philip Moore and Hai Van Pham

2. Simulation of Upward Underwater Image Distortion Correction
   Chengtao Cai, Jia Zheng, Yanhua Liang

3. Survey of Big Data Platform based on Cloud Computing Container Technology
   Liu Wei, Fan Weibei, Li Peng, Li Liangde

4. A Planner for Supporting Countermeasures in Large Scale Cyber Attacks
   Flora Amato and Francesco Moscato

5. Randomizing Greedy Ensemble Outlier Detection with GRASP
   Lediona Nishani and Marenglen Biba

19:00-21:00 Welcome Reception Party

ISMB Via P.C Boggio 61, 10138 Torino, Italy
link: `https://goo.gl/maps/PeVZ6ehuNg62`

Tuesday, July 11, 2017

08:00 Registration

09:00-10:00 Single Session: CISIS-2017 & IMIS-2017 Keynote II

CISIS-2017 & IMIS-2017 Keynote Talk II

Dr. Patrick Demichel: The future of IT technologies

10:00-10:30 Coffee Break

10:30-12:30 Parallel Sessions

CISIS-S7: FPGA Heterogeneous Architecture

Chair: Haruhi Eto, Nagasaki University, Japan

1. A Scalable and Low-Power FPGA-aware Network-on-Chip Architecture
   *Somnath Mazumdar, Alberto Scionti, Antoni Portero, Jan Martinovi	c, Olivier Terzo*

2. Design of a Control System Card for Frequency Inverter in FPGA
   Horacio Matsuura, Mauro Marcelo Mattos, Luiz Henrique Meyer

3. Ising-Model Optimizer with Parallel-Trial Bit-Sieve Engine
   Satoshi Matsubara, Hirotaka Tamura, Motomu Takatsu, Danny Yoo, Behraz Vatankhahghadim, Hironobu Yamasaki, Toshiyuki Miyazawa, Sanroku Tsukamoto, Yasuhiro Watanabe, Kazuya Takemoto and Ali Sheikholeslami

4. An FPGA Based Heterogeneous Redundant Control System Using Controller Virtualization
   Masaharu Tanaka, Haruhi Eto, Nobumasa Matsui, Fujio Kurokawa

5. Power Performance Analysis of FPGA-based Particle Filtering for Realtime Object Tracking
   Akane Tahara, Yoshiki Hayashida, Theint Theint Thu, Yuichiro Shibata, and Kiyoshi Oguri

6. HLS-based FPGA Acceleration of Building-cube Stencil Computation
   Rie Soejima, Yuichiro Shibata, and Kiyoshi Oguri

CISIS-S8: Wireless Networks and Applications

Chair: Junichi Honda, Electronic Navigation Research Institute, Japan

1. A Communication Method for Wireless Mesh Networks Suitable to IoT Communication Environment
   Kyohei Kishi, Hiroyuki Suzuki, Akio Koyama

2. A Delay-aware Fuzzy-based System for Selection of IoT Devices in Opportunistic Networks
   Miralda Cuka, Donald Elmazi, Tetsuya Oda, Elis Kulla, Makoto Ikeda, Leonard Barolli

3. A GA-Based Simulation System for WMNs: Performance Analysis for Different WMN Architectures Considering Weibull Distribution, HWMP and TCP Protocols
   Admir Barolli, Tetsuya Oda, Makoto Ikeda, Keita Matsuo, Leonard Barolli and Makoto Takizawa

4. Performance Measurement of Energy Management Controller Using Heuristic Techniques
   Adnan Ahmed, Awais Manzoor, Asif Khan, Adnan Zeb, Hussain Ahmad Madni, Umar Qasim, Zahoor Ali Khan and Nadeem Javaid

5. Evaluation of Never Die Network System for Disaster Prevention based on Cognitive Wireless Technologys
   Goshi Sato, Noriki Uchida, Norio Shiratori, Yoshitaka Shiabat

6. Influences of ILS Localizer Signal over Complicated Terrain
   Junichi Honda, Hirohisa Tajima and Hisashi Yokoyama

ePaMus-S1: Parallel and Multi-core Systems

Chair: Gul N. Khan, Ryerson University, Canada

1. A Bayes Classifier-based OVFDT algorithm for massive stream data mining on Big Data Platform
   Li Liangde, Li Peng, Xu He, Chen Fangzhou

2. Congestion Aware Routing for On-Chip Communication in NoC Systems
   Gul N. Khan and Stephen Chui

3. Data Locality Aware Algorithm for Task Execution on Distributed, Cloud Based Environments
   Mihai Bica and Dorian Gorgan

4. Asynchronous Page-Rank Computation in Spark
   Chao Li, JianXia Chen, Zhi Yang, WuYan Chen

SWISM-S1: Internet of Things: Current Applications and Future Trends

Chair: Beniamino Di Martino, Università degli Studi della Campania Luigi Vanvitelli, Italy

1. Providing Sensor Services by Data Correlation: the #SmartME Approach
   Nidhi Kushwaha, Giovanni Merlino, Francesco Longo, Dario Bruneo, Antonio Puliafito and O P Vyas

2. Plug'n'play IoT Devices: An Approach for Dynamic Data Acquisition from Unknown heterogeneous devices
   Argyro Mavrogiorgou, Athanasios Kiourtis, Dimosthenis Kyriazis

3. A Target Driven Approach supporting Data Diversified Generation in IoT applications
   Flora Amato, Beniamino Di Martino, Fiammetta Marulli, Antonino Mazzeo, Francesco Moscato

4. A Fuzzy Prolog and Ontology Driven Framework for Medical Diagnosis Using IoT Devices
   Beniamino Di Martino, Antonio Esposito, Salvatore Liguori, Francesco Ospedale, Salvatore Augusto Maisto, Stefania Nacchia

5. Towards the Integration of a HPC Duild System in the Cloud Ecosystem
   Ioan Drăgan, Teodora Selea and Teodor-Florin Fortiş

12:30-14:00 Lunch Break

14:00-16:00 Parallel Sessions

EASyCoSe-S1: Energy-Aware Systems, Communications and Security

Chair: Mauro Migliardi, University of Padova, Italy

1. Energy Efficient System for Environment Observation
   Giorgio Giordanengo, Luca Pilosu, Lorenzo Mossucca, Flavio Renga, Simone Ciccia, Olivier Terzo, Giuseppe Vecchi, Vincenzo Romano, Ingrid Hunstad

2. Balancing Demand and Supply of Energy for Smart Homes
   Saqib Kazmi, Hafiz Majid Hussain, Asif Khan, Manzoor Ahmad, Umar Qasim, Zahoor Ali Khan and Nadeem Javaid

3. EENET: Energy Efficient Detection of NETwork Changes Using a Wireless Sensor Network
   Walter Balzano, Aniello Murano and Fabio Vitale

4. Reducing the Impact of Traffic Sanitization on Latency Sensitive Applications
   Mauro Migliardi, Alessio Merlo and Sherenaz Al-Haj Baddar

5. Design and Deployment of Identity Recognition Systems
   Carlo Ferrari and Michele Moro

6. The Safety of Your Own App with App Inventor
   Paolo Musmarra

IINIC-S1: Intelligent Informatics and Natural Inspired Computing

Chair: Leonald Barolli, Fukuoka Institute of Technology, Japan

1. Energy-Aware Routing in A4SDN
   G. Cammarata, A. Di Stefano, G. Morana, D. Zito

2. Energy Optimization Algorithm based on Data Density Correlation in Wireless Sensor Network
   Jiang Wanyuan, Li Peng, Xu He, Nie Huqing

3. Design and Implementation of Urban Vehicle Positioning System Based on RFID, GPS and LBS
   Cong Qian, He Xu, Peng Li, Yizhuo Wang

4. Radio Spectrum Management for Cognitive Radio Based on Fuzzy Neural Methodology
   Hang Yang, Yuan Liang, Jingcheng Miao, Dongmei Zhao

5. Optimized Energy Efficient Routing using Dynamic Clustering in Wireless Sensor Networks
   M. Z. Siddiqi, N. Ilyas, A. Aziz, H. Kiran, S. Arif and J. Tahir, U. Qasim, Z.A. Khan, N. Javaid

6. Quantitative Deliberation Model and the Method of Consensus Building
   Xuan Li, Caiquan Xiong, Jiabao Guo, Gang Liu

SWISM-S2: Evolution of Distributed Computing: New Approaches and Applications

Chair: Salvatore Venticinque , Università degli Studi della Campania Luigi Vanvitelli, Italy

1. A Security Metric Catalogue for Cloud Applications
   Valentina Casola, Alessandra De Benedictis, Massimiliano Rak and Umberto Villano

2. Towards Osmotic Computing:Looking at Basic Principles and Technologies
   Massimo Villari, Antonio Celesti and Maria Fazio

3. Automatising Mashup of Cloud Services with QoS Requirements
   Claudia Di Napoli, Luca Sabatucci, Massimo Cossentino

4. Smart Communities of Intelligent Software Agents for Collaborating and semantically interoperable Micro-Grids
   Rocco Aversa, Beniamino Di Martino, Geir Horn, Svein Hallsteinsen, Salvatore Venticinque, Shanshan Jiang

5. A Simulation Approach for the Optimization of Solar Powered Smart Migro-grids
   Alba Amato, Rocco Aversa, Beniamino Di Martino, Marco Scialdone and Salvatore Venticinque

19:00-21:00 Banquet Party

Via Montebello, 20, 10124 Torino
link: `https://goo.gl/maps/YhhrAcu2Vsp`

Wednesday, July 12, 2017

CISIS-2017 Organizing Committee Meeting and Discussion

IMIS-2017
Main Conference and Workshops Program

Monday, July 10, 2017

08:00 Registration

09:00-10:00 Single Session: Opening Ceremony and CISIS-2017 & IMIS-2017 Keynote I

CISIS-2017 & IMIS-2017 Keynote Talk I (PLENARY ROOM)

Dr. Sven Helmer: Raspberries on the Edge

10:00-10:30 Coffee Break

10:30-12:30 Parallel Sessions

IMIS-S1: Intelligent Systems

Chair: Keita Matsuo, Fukuoka Institute of Technology, Japan

1. Performance Evaluation of Intelligent Hybrid Systems for Node Placement in Wireless Mesh Networks: A Comparison Study of WMN-PSOHC and WMN-PSOSA
   Shinji Sakamoto, Kosuke Ozera, Tetsuya Oda, Makoto Ikeda and Leonard Barolli

2. Performance Analysis of WMNs by WMN-GA Simulation System for Different WMN Architectures and TCP Congestion-Avoidance Algorithms Considering Exponential and Weibull Distributions
   Keita Matsuo, Shinji Sakamoto, Tetsuya Oda, Admir Barolli, Makoto Ikeda, Leonard Barolli

3. Fuzzy Energy Management Controller for Smart Home
   Rabiya Khalid, Samia Abid, Ayesha Zafar, Aneela Yasmeen, Zahoor Ali Khan, Umar Qasim, and Nadeem Javaid

4. Implementation of a WLAN Triage Testbed Using Fuzzy Logic: Evaluation for Different Number of Clients
   Kosuke Ozera, Takaaki Inaba, Shinji Sakamoto and Leonard Barolli

5. Converging Human Knowledge for Opinion Mining
   Jiacheng Liu, Feilong Tang, Long Chen, Liang Qiao, Yanqin Yang, and Wenchao Xu

IMIS-S2: Security Schemes and Tools

Chair: Lidia Ogiela, AGH University of Science and Technology, Poland

1. Security of Selected Secret Sharing Schemes
   Urszula Ogiela, Makoto Takizawa, Lidia Ogiela

2. Security Assessment of the Image-based Authentication using Screen-capture Tools
   Insu Oh, Yeunsu Lee, Hyeji Lee, Kyungroul Lee, Kangbin Yim

3. Design of a Smart Desk for an IoT Testbed: Improving Learning Efficiency and System Security
   Masafumi Yamada, Miralda Cuka, Yi Liu, Tetsuya Oda, Keita Matsuo, Leonard Barolli

4. The Study and Realization of Browser Defect Detection Technology Based on Intelligent Boundary Reverse
   Baojiang Cui, Yi Ren, Pin Mao

5. An Anonymous Access Authentication Scheme for VANETs based on ISGS
   Tianhan Gao, Yanqiang Li, Nan Guo

ITAUC-S1: Intelligent Techniques and Ubiquitous Computing

Chair: Hsing-Chung Chen, Asia University, Taiwan

1. Integration of Ubiquitous Specifications in the Lifecycle of Design Object Oriented
   Sonia Aimene and Idir Rassoul

2. Cuckoo Search Optimization Technique for Multi-objective Home Energy Management
   Adia Khalid, Ayesha Zafar, Samia Abid, Rabiya Khalid, Zahoor Ali Khan, Umar Qasim, and Nadeem Javaid

3. The Application of Heuristic Neural Network in Speed Estimation of Asynchronous Motor
   Shuqing Wang, Ruotian Yao, Yuexiang Mao

4. A New Collaborative Knowledge Integration Scheme
   Shian-Shyong Tseng, Yuh-Jye Wang

SMEUCE-S1: Sustainability Management of e-Business

Chair: Mei-Hua Liao, Asia University, Taiwan

1. Moving Average Timing Strategy from a Volatility Perspective: Evidence of the Taiwan Stock Market
   Shyh-Weir Tzang, Yung-Shun Tsai, Chun-Ping Chang, and Ya-Ping Yang

2. The Impact of Golden Cross and Death Cross Frequency on Stock Returns in pre- and post-Financial Crisis
   Yung-Shun Tsai, Chun-Ping Chang, and Shyh-Weir Tzang

3. Managers' Bargaining Power and the Intrinsic Value
   Chun-Ping Chang, Yung-Shun Tsai, and Shyh-Weir Tzang

4. Investigation into the Relationships among Sponsorship, Identification and Purchase Intention
   Chaio-Hsing Chen, Mei-Hua Huang, Perng-Fei Huang, Chiung-Yen Chen

5. The Effects of CSR Announcement on Long-Life business
   Mei-Hua Liao, Xiang-Ling Zhan, Hidekazu Sone

6. Serious Leisure and Flow Experience of Teenagers - A Case Study on the Activities of Orchestra
   Chiou-Shya Torng, Ming-Sui Weng, Chai-Ju Lu

12:30-14:00 Lunch Break

14:00-16:00 Parallel Sessions

IMIS-S3: Mobile and Wireless Networks

Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan

1. Performance Evaluation of a Deep Q-Network Based Simulation System for Actor Node Mobility Control in Wireless Sensor and Actor Networks Considering Different Distributions of Events
   Tetsuya Oda, Elis Kulla, Miralda Cuka, Donald Elmazi, Makoto Ikeda, Leonard Barolli

2. Proposal of Traffic Accident Prevention System with Chronological Variations of Wireless Signals and Sensors on Mobile Nodes
   Shoma Takeuchi, Noriki Uchida, Yoshitaka Shibata

3. A Fuzzy-based Testbed for Wireless Sensor and Actuator Networks: Performance Evaluation for Different Remaining Energy of Actuators
   Gaku Tsuchiya, Keisuke Ebisu, Makoto Ikeda, Donald Elmazi, Leonard Barolli and Elis Kulla

4. Monitoring of power transmission lines through wireless sensor networks in smart grid
   Malik Ali Judge, Awais Manzoor, Fahim Ahmed, Saqib Kazmi, Zahoor Ali Khan, Umar Qasim, and Nadeem Javaid

5. Two hop adaptive routing protocol for underwater wireless sensor networks
   Farwa Ahmed, Saba Gul, Muhammad Amir Khalil, Arshad Sher, Zahoor Ali Khan, Umer Qasim, and Nadeem Javed

6. A Macro-assisted Cooperative Edge Caching in Heterogeneous Mobile Networks
   Bingqian Li, Wen'an Zhou, Xuhui Yang

IMIS-S4: Security and Privacy

Chair: Baojiang Cui, Beijing University of Posts and Telecommunications, China

1. Study on Android Native Layer Code Protection Based on Improved O-LLVM
   Baojiang Cui, Qi Zhao, Tianyu Liu

2. A Two-Tiered Defence of Techniques to Prevent SQL Injection Attacks
   Yan Zhu,Guidong Zhang,Zhiquan Lai,Boya Niu,Yongjun Shen

3. EE-CFI : Externalized control flow integrity for embedded devices
   Valentin Lefils, Gilles Grimaud and Julien Iguchi-Cartigny

4. An Anonymous Authentication Scheme based on Group IBS for PMIPv6 Network
   Tianhan Gao, Xinyang Deng, Nan Guo

5. Evaluating User Vulnerability to Privacy Disclosures Over Online Dating Platforms
   Mona Nandwani and Rishabh Kaushal

ITAUC-S2: Cellular and Cognitive Radio Networks

Chair: Hsing-Chung Chen, Asia University, Taiwan

1. Enabling D2D Transmission Mode in Cellular Networks: Instantaneous Rate Consideration
   Huu-Phuc Dang, Hong-Nhu Nguyen, Thanh-Duc Le, Si-Phu Le, Dinh-Thuan Do, Jaroslav Zdralek and Miroslav Voznak

2. Performance Analysis of Wireless Powered Cognitive Radio Networks
   Thanh-Duc Le, Hong-Nhu Nguyen, Si-Phu Le, Dinh-Thuan Do, Jaroslav Zdralek and Miroslav Voznak

3. Performance of Power Allocation of Relay Stations for Cognitive Radio Based Cooperative Communication Systems
   Yung-Fa Huang, Tan-Hsu Tan, Yu-Shing Lee, Hsing-Chung Chen

SMEUCE-S2: Ubiquitous Commerce and Operation Management

Chair: Mei-Hua Liao, Asia University, Taiwan

1. The Impact of Government Shareholding on Firm Performance: A Corporate Governance Perspective
   Wen-Hsin Huang, Mei-Juh Huang, Mei-Hua Huang

2. The Impact of Corporate Social Responsibility and Organization Identification on Employee Engagement
   Chia-Ju Lu, Chiou-Shya Torng

3. A Study of Impact of Social Welfare from Public-Private-Partnerships: A Case of Taipei City Youbike
   Wen-Hsin Huang, Hsien-Feng Lee

4. The Influence of Senior Supervisors' Professional Degree and Their Job Changes and Part-time Duties on Corporate Performance
   Ying-Li Lin, Li-Yu Lin, Hsiu-Feng Huang

5. Causal Relationship between Research and Development Input, Research and Development Output, and Corporate Value
   Ying-Li Lin, Yu-Ju Chen, Tin-Chang Chang

6. A Study on the Influencing Factors of Consumers Repeat Purchasing Intention in International Travel Fair
   Hsiang-Chih Hu, Mei-Ying Chen, Shu-Hui Chuang

16:00-16:30 Coffee Break

16:30-18:30 Parallel Sessions

IMIS-S5: Knowledge Graph, Algorithms and Systems

Chair: Klodiana Goga, ISMB, Italy

1. Performance evaluation of clustering and collaborative filtering algorithms for resource scheduling in a public cloud environment
   Klodiana Goga, Fatos Xhafa, Olivier Terzo

2. BioGraphBot: A Conversational Assistant for Bioinformatics Graph Databases
   Antonio Messina, Agnese Augello, Giovanni Pilato, and Riccardo Rizzo

3. Analysis of Investment Relationships between Companies and Organizations Based on Knowledge Graph
   Xiaobo Hu, Xinhuai Tang, Feilong Tang

4. Application of Improved Software Phase-Locked-Loop in DSTATCOM
   Xiaoliang Wang, Xuhui Zhu, Xiaochen Lai, Chi Lin, and Shouwei Li

5. Digital Harmonic Detection with Rapid Response and High Steady Precision
   Xiaoliang Wang, Xiaochen Lai, Chi Lin, Zhen Xu, and Shouwei Li

6. A prospect of interdisciplinary methodology of QoE assessment
   Mengyu Gao, Wen'an Zhou, Zheng Hu, Wenji Zhang

IMIS-S6: Energy Saving Systems and Smart Homes

Chair: Makoto Takizawa, Hosei University, Japan

1. Ubiquitous and Pervasive Computing for Real-Time Energy Management and Saving: A System Architecture
   Simone Scannapieco and Claudio Tomazzoli

2. Simple Energy-aware Algorithms to Selecting a Server for Storage and Computation Processes in a Cluster
   Atsuhiro Sawada, Shigenari Nakamura, Dilawaer Duolikun, Tomoya Enokido, and Makoto Takizawa

3. An Energy-saving Unicast Routing Protocol in Wireless Ad-hoc Network
   Emi Ogawa, Shigenari Nakamura, Makoto Takizawa

4. User comfort oriented residential power scheduling in smart homes
   Awais Manzoor, Fahim Ahmed, Malik Ali Judge, Adnan Ahmed, Mirza Amaad Ul Haq Tahir, Zahoor Ali Khan, Umar Qasim, and Nadeem Javaid

5. User satisfaction based home energy management system for smart cities
   Fozia Feroze, Itrat Fatima, Saman Zahoor, Nabeeha Qayyum, Zahoor Ali Khan, Umar Qasim, and Nadeem Javaid

WAIS-S1: Information Security

Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan

1. A Novel and Practical Pseudonym Change Scheme in VANETs
   Yuanyuan Pan, Yongdong Shi, Jianqing Li

2. An Efficient Provably Secure Password-based Authenticated Key Agreement
   Hanqiu Xu, Qingping Wang, Jing Zhou, Ou Ruan

3. Proposal and Implementation of a Countermeasure against Event Tracking on the Web
   Takamichi Saito, Ryohei Hosoya, Koki Yasuda, Kazushi Takahashi, Yuta Tsunoda, Kazuhisa Tanabe, Masayuki Taneoka, Satoshi Yashiro

4. Self-Aware Access Control System for Android
   Nanda Kumar Thanigaivelan, Ethiopia Nigussie, Seppo Virtanen and Jouni Isoaho

5. Counterfeit Detection by Smartphone using Double-Encoded Two-dimensional Code
   Nobuyuki Teraura

6. Suspicious User Detection Based on File Server Usage Features
   Ryuichi Ohori and Satoru Torii

SMEUCE-S3: Sustainability Management and Service Innovation

Chair: Mei-Hua Liao, Asia University, Taiwan

1. Examining the Relationships among Electronic Word of Mouth, Perceived Value and Risk, and Consumer Purchase Intention
   Chung-Yi Hsu, Ya-Wen Huang, Shu-Hui Chuang

2. The Influence of Internationalization on Value Drivers: Song Ho Industrial Corporation, Ltd. vs. Chih Lien Industrial Corporation, Ltd.
   Kuei-Yuan Wang, Chien-Kuo Han, Xiao-Hong Lin, Ming-De Lin

3. A Comparative Study of Valuation and Value Drivers in the Textile Industry: Kwang Ming Silk Mill Co., Ltd. vs. Eclat Textile Co., Ltd.
   Kuei-Yuan Wang, Chien-Kuo Han, Xiao-Hong Lin, Chia-Hua Lin

4. Study of Social Loafing and Employee Creativity
   Ching-Hui Shih, Chun-Chiu Shao, Yao-Hua Wang

5. Customer Satisfaction and Quality of Service towards Public Servants in a Governmental Education Training Center in Taiwan
   Pei-Shih Chen, Tin-Chang Chang, Shu-Hui Chuang

6. The Effect of Flipped Classroom on Self-Efficacy and Satisfaction of Computer Auditing
    Ling-Yi, Chou

19:00-21:00 Welcome Reception Party

ISMB Via P.C Boggio 61, 10138 Torino, Italy
link: `https://goo.gl/maps/PeVZ6ehuNg62`

Tuesday, July 11, 2017

08:00 Registration

09:00-10:00 Single Session: CISIS-2017 & IMIS-2017 Keynote II

CISIS-2017 & IMIS-2017 Keynote Talk II

Dr. Patrick Demichel: The future of IT technologies

10:00-10:30 Coffee Break

10:30-12:30 Parallel Sessions

IMIS-S7: Multimedia and Web Computing

Chair: Markus Aleksy, ABB Corporation, Germany

1. Accuracy Is Not Enough: Serendipity Should Be Considered More
   Huan Yu, Ying Wang, Yaning Fan, Sachula Meng, and Rui Huang

2. Utilizing Augmented Reality and Wearables in Industrial Applications
   Markus Aleksy and Johannes Schmitt

3. Supporting Hypothesis Generation by Machine Learning in Smart Health
   Alba Amato, Antonio Coronato

4. Movie Recommendation Based on Visual Features of Trailers
   Yaning Fan, Ying Wang, Huan Yu, and Baoling Liu

5. A Study on the Motion Recognition of Basketball Players Based on Unit Gesture Decomposition
   Xiaochen Lai, Wenzhe Shi, Lu Liu, Xin Liu and Yu Zhao

6. Indoor Navigation System Based on Augmented Reality Markers
   Fumiaki Sato

FIMIS-S1: Innovative Mobile and Internet Services

Chair: Keita Matsuo, Fukuoka Institute of Technology, Japan

1. Approaching to Mobile 5G Communications
   Jahangir Dadkhah Chimeh, Mojtaba Mazoochi

2. Terrorists Spatio-Temporal Analysis Based on Social Network Tools
   Xuan Guo, Zhi-ting Xiao, Pin-shan Zeng,Ying Yang

3. Reliable Homomorphic Matrix Disguising Scheme
   Yonghui Chen, Mingwu Zhang, Chao Xu

4. Contention Window Prioritization for Heterogeneous Traffic in Wireless Sensor Networks
   Anwar Ahmed Khan, Sayeed Ghani, Shama Siddiqui

5. An Optimal Algorithm for Multiscale Segmentation of High Resolution Remote Sensing Image based on Spectral Clustering
   Huazhong Jin, Feng Guan, Fang Wan, Ou Ruan, Qing Li

FINGNet-S1: IoT and Mobile Networking

Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea

1. Effect of Polling Interval Distributions on the Performance of MAC Protocols in Wireless Sensor Networks
   Shama Siddiqui, Sayeed Ghani, Anwar Ahmed Khan

2. Lightweight Authentication for Distributed Mobile P2P Communications
   Jiyoung Lim, Inshil Doh, Kijoon Chae

3. Ontology Development for Dynamic Service Composition in Cyber-Physical Systems (CPSs)
   Sunghwan Jeong, Jun-Sik Kong, Mye Sohn, Hyun Hung Lee

4. Cross-recommendation Depending on Commonly Shared Users' Preferences in IoT Environment
   Hyun Jung Lee, Mye Sohn

esIoT-S1: IoT and Cyber-physical Systems

Chair: Antonio Jara, HES-SO, Switzerland

1. Low-level service management in Cyber-Physical Systems
   Borja Bordel, Ramón Alcarria, Diego Sánchez-de-Rivera, Antonio Jara

2. Flexible Service Provision in Context-aware Cyber-Physical Systems
   Ramón Alcarria, Borja Bordel, Antonio Jara

3. NOSE: A NOmadic Scalable Ecosystem for Pervasive Sensing, Computing and Communication
   Audrey Dupont, Yann Bocchi, and Gianluca Rizzo

4. Towards the CP-ABE Application for Privacy-Preserving Secure Data Sharing in IoT Contexts
   Salvador Pérez, Domenico Rotondi, Diego Pedone, Leonardo Straniero, María José Nuñez, and Fernando Gigante

12:30-14:00 Lunch Break

14:00-16:00 Parallel Sessions

BDITS-S1: Big Data and IoT Security

Chair: Baojiang Cui, Beijing University of Posts And Telecommunications, China

1. Software Abnormal Behavior Detection Based on Hidden Markov Model
   Jingling Zhao, Guoxiao Huang, Tianyu Liu, Baojiang Cui

2. TF Editor XSS fuzz framework
   Jun Yang, Qiyi Tang

3. Security Review and Study of DoS Attack on DNS in the International Roaming EPC_LTE Network
   Ya'nan Tian, Wenlong Liu

4. Exploiting a Bad User Practice to Retrieve Data Leakage on Android Password Managers
   Luca Casati and Andrea Visconti

5. A Context-aware Smart Office Application System
   Hou Yuan Wei Hao Yong Le, Xin Shu, Caiyuan Chen

6. A Novel Algorithm for Feature Selection Used in Intrusion Detection
   Yongle Hao, Ying Hou, Longjie Li

MCNCS-S1: Mobile Networks and Cloud Computing

Chair: Fang-Yie Leu, Tunghai University, Taiwan

1. Healthcare based on Cloud Electrocardiogram System :A Medical Center Experience in Middle Taiwan
   Xiu-Shu Zhang, Fang-Yie Leu, Ching-Wen Yang

2. An Iterative and Incremental Data Preprocessing Procedure for Improving the Risk of Big Data Project
   Sen-Tarng Lai, Fang-Yie Leu

3. Prediction of the Fragment of Video Streamed to Mobile Phones under a 5G Network Base Station
   Chien-Hsiang Kao, Fang-Yie Leu

4. MIH-based Congestion Control with Seamless Handover in Untrusted Networks
   Fang-Yie Leu, Chih-Chung Cheng

FINGNet-S2: Future Internet and Next Generation Networks

Chair: Hae-Duck Joshua Jeong, Korean Bible University, Korea

1. Power Beacon-assisted Relaying Scheme for Cellular Networks: System Model and Performance Analysis
   Si-Phu Le, Hong-Nhu Nguyen, Thanh-Duc Le, Huu-Phuc Dang, Dinh-Thuan Do, Jaroslav Zdralek and Miroslav Voznak

2. On the Outage Probability of Device-to-Device Communication Enabled NOMA
   Hong-Nhu Nguyen, Huu-Phuc Dang, Thanh-Duc Le, Si-Phu Le, Dinh-Thuan Do, Jaroslav Zdralek and Miroslav Voznak

3. Performance Analysis of Device-To-Device Communication Using AF Relaying Under Impact of Co-Channel Interferences
   Nguyen Thai Anh, Huu-Phuc Dang, Hong-Nhu Nguyen, Thanh-Duc Le, Si-Phu Le, Dinh-Thuan Do, Jaroslav Zdralek and Miroslav Voznak

4. A Search for Computationally Efficient Supervised Learning Algorithms of Anomalous Traffic
   Hae-Duck J. Jeong, Gil-Seong Jeong, Won-Jung Kim, Jinwon Kim, Hanbin Song, Myeong-Un Ryu, and Jongsuk R. Lee

esIoT-S2: Disaster Management and Smart Applications

Chair: Antonio Jara, HES-SO, Switzerland

1. Geo-based Content Sharing for Disaster Relief Applications
   Gianluca Rizzo and Helmut Neukirchen

2. Towards the Development of a Smart Tourism Application based on Smart POI and Recommendation Algorithms: Ceutı as a Study Case
   Joanna Alvarado-Uribe, Andrea Gómez-Oliva, Germán Molina, Miguel Gonzalez-Mendoza, Maria Concepcion Parra, and Antonio J. Jara

3. Moving Smartphones to Send Emergency Messages during Assaults
   Francisco Acosta, Miguel A. Wister, Jose A. Hernandez-Nolasco, and Pablo Pancardo

19:00-21:00 Banquet Party

Via Montebello, 20, 10124 Torino

link: `https://goo.gl/maps/YhhrAcu2Vsp`

Wednesday, July 12, 2017

IMIS-2017 Organizing Committee Meeting and Discussion

Time Table

CISIS-2017 and IMIS-2017 Session Schedule
July 10 – 12, 2017
Torino, Italy

Monday (July 10, 2017)		ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8
Slot	Time	Registration							
Session 1	09:00 – 10:00	CISIS-2017 and IMIS-2017 Keynote I (Plenary Room)							
Coffee Break	10:00 – 10:30	Coffee Break							
Session 2	10:30 – 12:30	CISIS S1	CISIS S2	VENOA S1	ECDS S1	IMIS S1	IMIS S2	ITAUC S1	SMEUCE S1
Lunch	12:30 – 14:00	Lunch Break							
Session 3	14:00 – 16:00	CISIS S3	CISIS S4	VENOA S2	FCISIS S1	IMIS S3	IMIS S4	ITAUC S2	SMEUCE S2
Coffee Break	16:00 – 16:30	Coffee Break							
Session 4	16:30 – 18:30	CISIS S5	CISIS S6	VENOA S3	ICLS S1	IMIS S5	IMIS S6	WAIS S1	SMEUCE S3
Social Event	19:00 – 21:00	*Welcome Reception Party*							

Tuesday (July 11, 2017)		ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8
Slot	Time	Registration							
Session 1	09:00 – 10:00	CISIS-2017 and IMIS-2017 Keynote II (Plenary Room)							
Coffee Break	10:00 – 10:30	Coffee Break							
Session 2	10:30 – 12:30	CISIS S7	CISIS S8	ePaMuS S1	SWISM S1	IMIS S7	FIMIS S1	FINGNet S1	ESIoT S1
Lunch	12:30 – 14:00	Lunch Break							
Session 3	14:00 – 16:00	EASyCoSe S1	IINIC S1		SWISM S2	BDITS S1	MCNCS S1	FINGNet S2	ESIoT S2
Social Event	19:00 – 21:00	*Banquet Party*							

Wednesday (July 12, 2017)		ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8
Slot	Time	CISIS-2017 and IMIS-2017 Steering Committee Meeting and Discussion							