SITIS 2016 Track Messages

I-WeCA
Intelligent Web Computing and Applications

Editorial

I-WeCA focuses on emerging concepts, architectures, protocols, and methodologies for both information management on the Web and the Internet of Things (IoT) technologies that connect unlimited numbers of smart objects to make our environment more interactive. In such an interconnected world, information can be exchanged easily, tasks can be processed collaboratively, devices and objects can be intelligently connected, communities of users with similar interests can be formed to achieve their goals efficiently and improve performance. Taking full advantage of these interconnected environments and available Web information as well to meet the ever increasing needs of emerging applications requires solutions that address new issues and challenges. Novel architectures and solutions are being proposed promoting the dawn of the Internet of Things – or so called Intelligent Web – era, ranging over enhanced machine-to-machine communications, resource sharing and processing of linked data and devices, distributed computing and cooperative systems, mobile information systems and services, semantic-based applications and intelligent data processing, as well as enhanced data security and privacy protocols, etc., to state a few examples.

A total of 20 papers were submitted to the track from 20 countries (many papers were co-authored by peers from different countries) covering the major topics of I-WeCA. The review process was carried by about 35 experts from 8 countries representing the respective areas of the track with an outstanding eye for current developments. Committee members had a challenging task of choosing the highest quality submissions. All the submitted papers have been reviewed by at least three reviewers focusing on scientific value, readability, and relevance to the topics of the track. The program committee selected 11 papers for inclusion in the proceedings and presentation at the main conference of SITIS 2016, resulting in a paper acceptance rate of 55%.

Our deep gratitude goes to the authors who submitted their work, and to our international Program Committee members for their support in reviewing the papers and for promoting I-WeCA. This edition of I-WeCA would not have been possible without the dedicated work of many people. We sincere thank Prof. Giuseppe De Pietro for his invaluable contribution to success of the conference. Our thanks also go to the members of the local organizing committee. We hope the participants will find the track discussions meaningful for their current and future work. We look to meeting all in the beautiful city of Naples.

Joe Tekli, Lebanese American University, Lebanon
Allel Hadjali, ENSMA, Poitiers, France
Kokou Yetongnon, University of Bourgogne, France
I-WeCA Chairs

November 2016

MIRA
Multimedia Information Retrieval and Applications

Editorial

An explosive growth can be experienced in multimedia and other social media appearing online on mobile, wearable and other devices in recent years. The Multimedia Information Retrieval and Applications (MIRA) track is based on emerging interdisciplinary multimedia research and systems dealing with conventional and big multimedia data. Clearly, the importance of carrying out novel research and providing us with new ideas in the area of multi-media analysis and retrieval is increasing day by day. Therefore, this year's topics in the MIRA track emphasize on new applications and services that are based on state-of-the-art methods including machine learning techniques. These applications can analyze, retrieve, classify and annotate multimedia information even for big multimedia data coming from areas such as medical, news video, art, and automatic translation, as well as they can help to establish semantical and contextual connections among users on the basis of the information of their interest.

The MIRA track received 16 submissions from 13 countries from all over the world this year. After a very severe and careful reviewing process, when an average of 3 expert reviewers evaluated each paper, 9 papers were accepted giving us a 56% acceptance ratio. All accepted papers had a positive score, showing that the average quality of the papers is very high. We hope that the sessions organized in the MIRA track will provide an opportunity for all participants for fruitful discussions on the scientific and relationship aspects.

We would like to thank to all 59 members of our International Programming Committee for all of their invaluable and time-consuming efforts in writing such up-to-date and high-quality reviews in a very limited time. We are also very grateful to all authors of submitted papers. It would not have been possible to organize this track without their contributions reflecting state-of-the-art multimedia research and applications. This edition of MIRA would not have been possible without the dedicated work of many people.

We look forward to meeting with you all on the conference in the amazingly beautiful, historic and romantic city of Naples.

Dr. Andrea Kutics, International Christian University, Japan
MIRA Chair

November 2016

SLNA
Social Networks, Large Networks, and Their Applications

Editorial

The SLNA track focuses on social large networks and the related underpinning research challenges: how to use techniques and approaches from fields such as complex graphs, semantics, Big Data and security in order to improve the social networks of today.

A total of 16 papers were submitted to the track from various countries (many papers were co-authored by peers from different countries) covering the major topics of SLNA. The review process was carried by about 23 experts from 10 countries representing the respective areas of the track with an outstanding eye for current developments. Committee members had a challenging task of choosing the highest quality submissions. All the submitted papers have been reviewed by at least two reviewers focusing on scientific value, readability, and relevance to the topics of the track. The program committee selected 10 papers for inclusion in the proceedings and presentation at the main conference of SITIS 2016, resulting in a paper acceptance rate of 62.5%.

Our deep gratitude goes to the authors who submitted their work, and to our international Program Committee members for their support in reviewing the papers and for promoting the SLNA track. We would also like to thank the members of the local organizing committee. We hope the participants will find the track discussions meaningful for their current and future work. We look forward to meeting everyone in the beautiful city of Naples.

Ana Roxin, University of Burgundy, France
Alessandro Provetti, University of Messina, Italy
Ernesto Damiani, University of Milan, Italy
SLNA Chairs

November 2016

SIVT
Signal Image & Vision Technology

Editorial

The domain of Signal Image and Vision Technology (SIVT) is a very active research area with extremely promising applications and research outcomes. The steering committee of SITIS conference recognized few years ago the great research potential of this area by placing the SIVT track as one of the main tracks of the conference. A large community worldwide is involved in SIVT and developing new algorithms and applications as concrete solutions in different disciplines including education, health, security, energy, cultural heritage, robotics, space, etc. Clearly, in today's society visual information is becoming increasingly important and this is reflected in the submissions we have received for the track.

The SIVT track for the SITIS 2016 International Conference has received 57 submissions from around 29 countries on a large variety of areas. Each paper was assigned to 3 members of the program committee for review, and at least 2 reviews were recorded for each paper. We have selected 32 papers for presentation (55% rate of acceptance). All accepted papers had a positive review score, which shows the good quality of the overall submissions. These accepted papers have been organized in a total of 7 sessions. The sessions span on main disciplines of SIVT including color, image processing, face recognition, video processing and applications.

We would like to thank the international program committee for their valuable help in the review process. This program committee was composed of 75 international reviewers from more than 35 countries. Their constructive comments have ensured the high quality of papers selected for presentation and publication in the conference proceedings.
We also thank all the authors of accepted papers for their excellent contributions and look forward to meeting them at the conference. We hope this conference will provide an opportunity for all the participants for fruitful discussions on the scientific and relationship aspects.

Enjoy the conference and enjoy the amazing city of Naples.

Dr. Neeta Nain, Malaviya National Institute of Technology Jaipur, India
Dr. Albert Dipanda, University of Burgundy, France
SIVT Chairs

November 2016

SITIS 2016 Workshop Messages

VICTA
Visions on Internet of Cultural Things and Applications

Editorial

The adoption of Future Internet (FI) technology, and in particular of its most challenging components like the Internet of Things (IoT) and Internet of Services (IoS), can constitute the basic building blocks to progress towards unified ICT platforms for a variety of applications within the large framework of smart cities. The combination of the Internet and emerging technologies such as near-field and BLE communications, real-time localization, and embedded sensors lets us transform everyday objects into smart objects that can understand and react to their environment.

In its third edition, the VICTA workshop is hosted by the SITIS conference. This year we selected interesting and original research papers regarding the Internet of Things, sensor networks and ICT technologies applied to the Cultural Heritage domain.

We would like to give some special thanks to the authors who entrusted us with their work. We also would like to thank the program committee members for accepting using their time in reviewing papers and for their suggestions and remarks. All the papers submitted to VICTA 2016 from around the world have been peer reviewed by at least two members of the International Program Committee. We would like to give a special acknowledgement to the SITIS conference board for letting us use its facilities, structures and to kindly host this workshop.

Angelo Chianese, University of Naples "Federico II", Italy
Francesco Piccialli, University of Naples "Federico II", Italy
VICTA Chairs

November 2016

IWAIIP
Artificial Intelligent Approaches for Image Processing

Editorial

Recently, artificial intelligent and image processing methods have demonstrated successes on a wide variety of real world challenges. This is due to the great efforts put by a diverse group of people working on real world systems for commercial and industrial applications. This workshop aims to provide a collection of high quality research articles that address broad challenges on both theoretical and application aspects of artificial intelligence in image processing. We invite colleagues to contribute original research articles that will stimulate the continuing effort on the application of artificial intelligent approaches to solve image processing problems. In addition to their empirical successes, the IWAIIP workshop provides a forum for artificial intelligent and image processing researchers working on practical applications to share their latest contributions and developments.

For this first edition of the IWAIIP workshop, we received 21 papers from 3 countries. These papers cover various research domains addressed by the workshop. All publications have been peer reviewed from at least 3-4 reviewers, and at least 3 reviews were recorded for each paper. We have selected 12 papers for presentation (57% rate of acceptance). We would like to express our most sincere thanks to all program committees for the invaluable support in the reviewing process and for their helpful comments. Moreover, we would like to give a special acknowledgement to the SITIS conference board for kindly hosting this workshop and letting us use its facilities and structures.

We hope that this workshop stimulates the interaction and cooperation around the engaging world of artificial intelligent approaches for image processing. We wish you enjoy the conference and enjoy the beautiful culture of Naples, Italy.

Mahasak Ketcham, King Mongkut's University of Technology North Bangkok, Thailand
Narit Hnoohom, Mahidol University, Thailand
Thaweesak Yingthawornsuk, King Mongkut's University of Technology Thonburi, Thailand
Kirk Scott, University of Alaska Anchorage, United States of America
IWAIIP Chairs

November 2016

NAMDAC
Numerical Algorithms and Methods for Data Analysis and Classification

Editorial

The extraction and the assessment of useful information from the huge amount of data available in Bioinformatics, Neurosciences, Cloud Web Services or Climate modelling poses many challenges and difficulties. The goal of the workshop will be to approach and discuss recent trends in data mining, focusing on the analysis and the classification of large data sets using novel methods, numerical models and efficient and reliable algorithmic strategies belonging to the family of clustering and genetic algorithms, neural networking and regression analysis. In particular, we are interested in the emerging techniques for data analysis addressed to relevant real-world applications, in order to share ideas, experiences and research results.

The NAMDAC track received 14 submissions from 4 countries from all over around the world this year. After a very severe and careful reviewing process, when 6 expert reviewers evaluated each paper, 11 papers were accepted giving us a 78.5% acceptance rate. All accepted papers had a positive score, showing that the average quality of the papers is very high. We hope that the sessions organized in the NAMDAC track will provide an opportunity for all participants for fruitful discussions on the scientific and relationship aspects.

We would like to thank to all 12 members of our International Programming Committee and, in particular, the 6 reviewers for all of their invaluable and time-consuming efforts in writing such up-to-date and high-quality reviews in a very limited time. We are also very grateful to all authors of submitted papers. It would not have been possible to organize this track without their contributions reflecting state-of-the-art multimedia research and applications. This edition of NAMDAC would not have been possible without the dedicated work of many people.

We look forward to meeting with you all on the conference in the amazingly beautiful, vibrant and cosmopolitan city of Naples.

Salvatore Cuomo, University of Naples Federico II, Naples, Italy
Ardelio Galletti, University of Naples Parthenope, Naples, Italy
Livia Marcellino, University of Naples Parthenope, Naples, Italy
Jose C. Valverde, University of Castilla-La Mancha, Castille-La Mancha, Spain
NAMDAC Chairs

November 2016

HTBA
Human Tracking and Behavior Analysis

Editorial

Video processing to analyze human gesture is a hot and promising topic since it was adopted in many various applications as video surveillance, medical monitoring, virtual reality, interaction with machines, etc. The human class is a core concern of research and industry because it points the way towards the artificial intelligence. How can a computer do the same interpretation of a scene that a human can do? The possibilities are endless but are reliant on the effectiveness of primal processes: analyzing and recognizing human gestures and behaviors. This workshop aims to investigate the various meanings, media (2D or 3D captors) and constraints (real-time) that leads to answer to the three mean steps of this problematic: tracking, description and learning. The processes have to be adapted to the particularly complex class of the human. The way to follow movement, describe gesture and recognize behaviors at different level (full body, legs, hand, etc.) will be brought.

For this first edition of the HTBA workshop, we received 11 papers from 9 countries. These papers cover various research fields addressed by the workshop. All publications have been peer reviewed from 3 reviewers, and at least 2 reviews were recorded for each paper.

We take the occasion to thank all members of the HTBA Program Committee for the time they have spent to provide relevant and detailed review reports. We thank all the authors who have chosen our workshop to expose their works for the diversity of their contributions. Finally, we are extremely grateful to the SITIS organizers for having hosted this first edition of the workshop.

We wish you enjoy the workshop and share your knowledge, perspective and expertise in the field.

Cyrille Migniot, Le2i, Université de Bourgogne, France
Fakhreddine Ababsa, IBISC, Université d'Evry Val d'Essonne, France
HTBA Chairs

November 2016

KARE
Knowledge Acquisition, Reuse, and Evaluation

Editorial

Knowledge Management (KM) is one of the key progress factors in organizations. It aims at capturing explicit and tacit knowledge of an organization in order to facilitate the access, sharing, and reuse of that knowledge as well as creation of new knowledge and organizational learning. KM must be guided by a strategic vision to fulfill its primary organizational objectives: improving knowledge sharing and cooperative work inside the organization; disseminating best practices; improving relationships with the external world; preserving past knowledge of the organization for reuse; improving the quality of projects and innovations; anticipating the evolution of the external environment; and preparing for unexpected events and managing urgency and crisis situations. Several techniques can be considered, according to the type of organization, its needs and its culture: knowledge-based approaches, document-based approaches, workflow-based approaches, CBR-based approaches, CSCW and cooperative approaches, ontology-based approaches, corporate Semantic Webs, Semantic Web Services approaches, Web-based approaches, agent-based approaches, distributed OMs, etc. Several scenarios of KM can be tackled through OMs: project memory, skills management, communities of practice, strategic or technological watch, etc.

This workshop will focus on the theoreticians and practitioners concerned with developing methods and systems that assist the knowledge management process and assessing the suitability of such methods. Thus, the workshop includes all aspects of acquiring, modeling and managing knowledge, and their role in the construction of knowledge-based systems. Knowledge acquisition still remains the bottleneck for building a knowledge based system. Reuse and sharing of knowledge bases are major issues and no satisfactory solutions have been agreed upon yet. There is a wide range of research. Much of the work in this field has been knowledge acquisition. The advent of the age of digital information has brought the problem of knowledge reuse and knowledge evaluation. Our ability to analyze, evaluate and assist user in reusing knowledge present a great challenge of the next years. A new generation of computational techniques and tools is required to support the acquisition, the reuse and the evaluation of useful knowledge from the rapidly growing volume of information. All of these are to be discussed in this workshop.

We received papers from different countries around the world: this seventh edition of the KARE workshop can be considered fully international. After a peer review process in which all the papers were reviewed at least by three reviewers, eight papers were selected for presentation. The accepted papers are grouped in one presentation session which cover Knowledge Management fields.

We hope that you enjoy attending the KARE workshop and that you find in its sessions and proceedings a challenging resource for your present and future research work.

Davy Monticolo, University of Lorraine, France
KARE Chair

November 2016

CITIMA
Computational Intelligence Techniques for Industrial and Medical Applications

Editorial

Computational Intelligence techniques are adopted in many industrial applications, like visual based quality control, image enhancement in consumer electronics, image quality enhancement, video based recognition of identity or behaviors, audio based speech recognition for enhanced human like interaction with machines etc. It also has a strong impact in medical applications, like medical image enhancement, semi-automatic detection of pathologies, pre-filtering and reconstruction of volumes from medical scans etc. Despite this growing diffusion, there are still many possible areas where computational intelligence application is partial or could be extended and improved, due to the actual limitations in terms of computational power or strict requirements in terms of assurance of the results.

The CITIMA workshop aims to investigate the impact of the adoption of advanced and innovative Computational Intelligence techniques in industrial and medical applications. This edition of the workshop is focused primarily on imaging and multimedia based industrial and medical applications with special emphasis to real time systems.

The workshop will bring together researchers on different disciplines from academia and industry with the common objective of going beyond the frontiers of today industrial and medical applications. We are confident that it will constitute an excellent opportunity for the participant to engage in fruitful scientific and technical discussions.

We have selected 6 papers for presentation (50% rate of acceptance), which had a positive score during the reviewing process. All papers were assigned to 3 members of the program committee for review, and at least 2 reviews were recorded for each paper. We would like to thank the international program committee for the support in the reviewing process and for their helpful comments

Marco Anisetti, Università degli studi di Milano, Italy
Roberto Sassi, Università degli studi di Milano, Italy
Valerio Bellandi, Università degli Studi di Milano, Italy
Gwanggil Jeon, Incheon National University, Korea
CITIMA Chairs

November 2016

BigCVEn
Big Data Meets Cloud and Virtualized Environment

Editorial

The BigCVEn workshop focuses on research challenges induced by the growth of Big Data, Linked Data and Cloud Computing. The goal is to bring together scientists, researchers and practitioners interested in these emerging architectures and methodologies for capturing, storing, managing and analyzing massive, dispersed, interconnected data over the Web.

A total of 4 papers were submitted to the track from various countries (many papers were co-authored by peers from different countries) covering mainly Big Data and Cloud Computing domains. The review process was carried by about 10 experts from several countries representing the respective areas of the workshop. Committee members had a challenging task of choosing the highest quality submissions. All the submitted papers have been reviewed by at least two reviewers focusing on scientific value, readability, and relevance to the topics of the track. The program committee selected 3 papers for inclusion in the proceedings and presentation at the main conference of SITIS 2016.

Our deep gratitude goes to the authors who submitted their work, and to our international Program Committee members for their support in reviewing the papers and for promoting the BigCVEn workshop. We would also like to thank the members of the local organizing committee. We hope the participants will find the track discussions meaningful for their current and future work. We look forward to meeting everyone in the beautiful city of Naples.

Ana Roxin, University of Burgundy, France
Gayo Diallo, University of Bordeaux, France
Sadok Ben Yahia, University of Tunis, Tunisia
BigCVEn Chairs

November 2016