

CCPS 2016

2nd International Conference on Data Compression, Communication, Processing and Security



September 22-23, 2016
Hotel Cetus - Cetara (Salerno), Italy

<http://ccps2016.di.unisa.it>



Conference Program

Co-Sponsored by:



UNIVERSITÀ DEGLI STUDI DI SALERNO



UNIVERSITÀ DEGLI STUDI DI SALERNO
DIPARTIMENTO DI INFORMATICA

Contents

| | |
|---|---|
| Contents | 2 |
| Organizing Committee..... | 3 |
| GENERAL CHAIRS | 3 |
| PROGRAM COMMITTEE..... | 3 |
| LOCAL ORGANIZING COMMITTEE..... | 3 |
| Welcome Message from the General Co-Chairs..... | 4 |
| Detailed Program | 5 |
| Thursday, September 22, 2016 | 5 |
| 09:30 Registration..... | 5 |
| 10:00 Opening | 5 |
| 10:30 Session 1 | 5 |
| 13:30 Lunch Break..... | 5 |
| 15:30 Session 2 | 5 |
| Friday, September 23, 2016 | 6 |
| 09:30 Registration..... | 6 |
| 10:00 Session 3 | 6 |
| 13:00 Lunch Break..... | 6 |
| 15:00 Session 4 | 6 |
| 19:30 Banquet | 6 |
| Time Table | 7 |

Organizing Committee

GENERAL CHAIRS

Bruno Carpentieri (Salerno University - Italy)

Francesco Palmieri (Salerno University - Italy)

PROGRAM COMMITTEE

Nik Bessis (Edge Hill University - UK)

Santi Caballe (Open University of Catalonia – Spain)

Aniello Castiglione (Salerno University - Italy)

Luigi Catuogno (Salerno University - Italy)

Francesco Colace (Salerno University - Italy)

Alfredo De Santis (Salerno University - Italy)

Massimo De Santo (Salerno University - Italy)

Agnieszka Jakobik (Cracow University of Technology - Poland)

Joanna Kolodziej (Cracow University of Technology - Poland)

Fang-Ye Leu (Thunghai University - Taiwan ROC)

Jin Li (Guangzhou University - China)

Mauro Migliardi (Padua University - Italy)

Marek Ogiela (AGH University of Science and Technology - Poland)

Sergio Ricciardi (Universitat Politècnica de Catalunya - Spain)

Ilsun You (Soonchunhyang University - South Korea)

Salvatore Vitabile (Palermo University - Italy)

LOCAL ORGANIZING COMMITTEE

Arcangelo Castiglione (Salerno University - Italy)

Christian Esposito (Salerno University - Italy)

Raffaele Pizzolante (Salerno University - Italy)

Welcome Message from the General Co-Chairs

Welcome to the Second International Conference on Data Compression, Communication, Processing and Security (CCPS 2016, Cetara (SA), September 22-23, 2016). This Conference follows and extends the first edition that was held in Palinuro (Salerno - Italy) in June, 2011.

The main goal of this event is to bring together researchers and practitioners, from both the industrial and academic communities, who are interested in addressing issues and challenges as well as exchanging ideas related to the theoretical and practical aspects of Data Compression, Data Communication, Data Processing and Data/Information Security.

The papers included in the proceedings present novel ideas or state-of-the-art perspectives regarding the topics of interest of the conference.

Each submitted paper was peer-reviewed by experts in its specific subject area. Based on the review results, the Program Committee has accepted 24 papers.

The support and help of many people is needed in order to organize an international event. We would like to thank all authors for submitting and presenting their papers. We also greatly appreciated the support of the program committee members and the reviewers who carried out the most difficult work of carefully evaluating the submitted papers.

We would like to give special thanks to the Department of Computer Science of the University of Salerno and to the University of Salerno for co-sponsoring the initiative. Our thanks also go to the local organizing committee members for their support in organizing the event.

We are sure that the beautiful location and the relaxing atmosphere of the venue will be the perfect ingredients for a successful international event, providing a unique opportunity for both researchers and technologists to present, share, and discuss leading research topics, developments, and future directions in their area of interest.

We hope all of you will enjoy CCPS 2016 and find this a productive professional growth opportunity.

The CCPS 2016 Conference Co-Chairs

Bruno Carpentieri, Department of Computer Science, University of Salerno, Italy
Francesco Palmieri, Department of Computer Science, University of Salerno, Italy

Detailed Program

Thursday, September 22, 2016

09:30 Registration

Attendance Kits available at the Conference Desk

10:00 Opening

Welcome from the Conference Organizers and Salutation

10:30 Session 1

Chair: Prof. Stefano Marrone, Second University of Napoli

1. Crowd-Sourcing an Ontology: Is It Feasible? (M. Migliardi, A. Merlo, S. I. Lopes)
2. A Model Driven Approach for Assessing Survivability Requirements of Critical Infrastructures (U. Gentile, S. Bernardi, S. Marrone, J. Merseguer, V. Vittorini)
3. Cyber Attack Prediction using Social Data Analysis (B. Munkhdorj, S. Yuji)
4. A New Bio-Inspired Analysis Methodology for Digital Ecosystems based on a Scale-free Architecture (V. Conti, S. Vitabile, and L. Barolli)
5. Design and Implementation of a Multi-modal Biometric System for Company Access Control (E. Stefani, C. Ferrari)
6. Centralized Model for VANET Management and Clustering Process: Features and Benefits (W. Balzano, M. R. Del Sorbo, A. Murano, S. Stranieri)

13:30 Lunch Break

15:30 Session 2

Chair: Prof. Mauro Migliardi, University of Padova

1. Traffic matrix estimation with Software-Defined NFV: challenges and opportunities (U. Fiore, P. Zanetti, F. Palmieri, F. Perla)
2. Big Data technologies for Multi-Experiment Data Searching (Silvio Pardi, Guido Russo)
3. The Cyber Security Challenges in the IoT era (A. Scarfò)
4. An Algorithm to Detect Complexes in PPI network based on Harmony Search Clustering Optimization (Chen Xie Yang Cao Huang Li)
5. Lossy Compression of Image Sequences through the AVQ algorithm (R. Pizzolante)
6. News Event Evolution Model based on the Reading Willingness and Modified TF-IDF Formula (W. Angzhan, L. Weiwei, M. Yacong, K. Liu)

Friday, September 23, 2016**09:30 Registration**

Attendance Kits available at the Conference Desk

10:00 Session 3

Chair: Prof. Carlo Ferrari, University of Padova

1. Towards Efficient Positional Inverted Index (Petr Prochazka, Jan Holub)
2. A Context-Aware Approach for an Adaptive and Mobile Digital Storytelling (Francesco Colace, Massimo De Santo, Saverio Lemma, Marco Lombardi)
3. Detecting Triple Data for Security Ontology based on Semantic Parsing (E. Lee, C. Choi, P. Kim)
4. HyPaCo: a new model for Hybrid Paths Compression of geodetic tracks (W. Balzano, A. Murano, F. Vitale)
5. Image autofocusing via direct fuzzy transform (F. Di Martino, S. Sessa)
6. Concurrent vs Exclusive Reading in Parallel Decoding of LZ-Compressed Files (S. De Agostino)

13:00 Lunch Break**15:00 Session 4**

Chair: Prof. Walter Balzano, Federico II University

1. Performance issues in content dissemination to metropolitan mobile users (G. Corrente)
2. KONFIDO Project: a secure infrastructure increasing interoperability on a systemic level among eHealth services across Europe (L. Coppolino, S. D'Antonio, L. Romano, M. Staffa)
3. Semantic-Based Bilingual Text-Mining (M. Monteleone, A. Postiglione)
4. SMARTApp Salerno: a Context Aware App for e-tourism (F. Colace, M. De Santo, S. Lemma, M. Lombardi)
5. On-Field Evaluation of Pacemaker Cluster Resource Manager Reliability (L. Coppolino, S. D'Antonio, G. Mazzeo, L. Romano)
6. Object tracking with optical-flow under dynamic background (L. Hong, Z. Wei, F. Yi)

19:30 Banquet

In the Rock Hall, built into the rock like a gemstone, overlooking the endless blue sea

All the sessions are held in Sala "Sole Luna", 3rd floor

Time Table

| Time | Thursday, September 22, 2016 | Thursday, September 23, 2016 |
|-------|------------------------------|------------------------------|
| 09:30 | Registration | Registration |
| 10:00 | Opening Ceremony | Session 3 |
| 10:30 | Session 1 | |
| 11:00 | | |
| 11:30 | | |
| 12:00 | | |
| 12:30 | Lunch Break | Lunch Break |
| 13:00 | | |
| 13:30 | | |
| 14:00 | Session 2 | Session 4 |
| 14:30 | | |
| 15:00 | | |
| 15:30 | | |
| 16:00 | [Blank] | [Blank] |
| 16:30 | | |
| 17:00 | | |
| 17:30 | | |
| 18:00 | | |
| 18:30 | [Blank] | Banquet Party |
| 19:00 | | |
| 19:30 | | |
| 20:00 | | |
| 20:30 | | |
| 21:00 | [Blank] | [Blank] |
| 21:30 | | |