

GPC 2017

The 12th International Conference on **G**reen,
Pervasive and **C**loud Computing

May 11-14, 2017

Hotel Cetus - Cetara (Salerno), Italy

Co-Organized by



Conference Program

Co-Sponsored by:



UNIVERSITÀ DEGLI STUDI DI SALERNO
DIPARTIMENTO DI INFORMATICA

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Tianqing Zhu, Deakin University, Australia
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1st International Workshop on Digital Knowledge Ecosystems

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Gihan Wikramanayake, University of Colombo, Sri Lanka

1st Workshop on Cloud Security Modeling, Monitoring and Management (CS3M 2017)

Chairs

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Prof. Valentina Casola, University of Naples Federico II, Italy

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Dr. Parnian Najafi, Ph.D Student at George Mason University, USA

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Prof. Massimiliano Rak, Second University of Naples, Italy

Prof. Umberto Villano, University of Sannio, Italy

Welcome Message from the GPC 2017 Chairs

It is our pleasure to welcome you to the 12th International Conference on Green, Pervasive and Cloud Computing (GPC 2017), held in Cetara, Italy, during May 11–14, 2017. The papers included in the proceedings present novel ideas or state-of-the-art perspectives regarding the topics of interest of the conference.

GPC aims at bringing together international researchers and practitioners from both academia and industry who are working in the areas of green computing, pervasive computing, and cloud computing.

GPC 2017 was the next event in a series of highly successful events focusing on pervasive and environmentally sustainable computing. In the last 11 years, the GPC conference has been successfully held and organized all over the world: Taichung, Taiwan (2006), Paris, France (2007), Kunming, China (2008), Geneva, Switzerland (2009), Hualien, Taiwan (2010), Oulu, Finland (2011), Hong Kong (2012), Seoul, Korea (2013), Wuhan, China (2014), Plantation Island, Fiji (2015), and Xian, China (2016).

In this edition the value, overall quality, and scientific and technical depth of the GPC conference continued to strengthen and grow in importance for both the academic and industrial communities. Such strength was evidenced this year by having a significant number of high-quality submissions resulting in a highly selective program. All submissions received at least two reviews according to a high-quality peer review process involving about 140 Program Committee members and several additional reviewers. On the basis of the review results, 58 papers were selected for presentation at the conference, with an acceptance rate lower than 35%. In addition, the conference also featured four invited talks, a tutorial and 2 satellite workshops.

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 sincerely thank all the chairs and Steering Committee members. Without their hard work, the success of GPC 2017 would not have been possible.

Last but certainly not least our thanks go to all the attendees that contributed to the success of the conference. Finally, 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.

Hoping all of you will enjoy the conference and find this a productive professional growth opportunity.

Cetara, May 2017

The GPC 2017 Conference Chairs

Detailed Program

Thursday, May 11, 2017

08:30-09:30 Registration

Attendance Kits available at the Conference Desk

09:30-10:00 Opening

Opening Ceremony: Welcome from the Conference Organizers and Salutation

10:00-11:00 Plenary Keynote 1: Security and Privacy in the IoT

Prof. Elisa Bertino, Purdue University and Research Director of the Center for Information and Research in Information Assurance and Security (CERIAS), USA

The Internet of Things (IoT) paradigm refers to the network of physical objects or “things” embedded with electronics, software, sensors, and connectivity to enable objects to exchange data with servers, centralized systems, and/or other connected devices based on a variety of communication infrastructures. IoT makes it possible to sense and control objects creating opportunities for more direct integration between the physical world and computer-based systems. IoT will usher automation in a large number of application domains, ranging from manufacturing and energy management (e.g. SmartGrid), to healthcare management and urban life (e.g. SmartCity). However, because of its fine-grained, continuous and pervasive data acquisition and control capabilities, IoT raises concerns about the security and privacy of data. Deploying existing data security solutions to IoT is not straightforward because of device heterogeneity, highly dynamic and possibly unprotected environments, and large scale. In this talk, after outlining key challenges in data security and privacy, we present initial approaches to securing IoT data, including efficient and scalable encryption protocols, software protection techniques for small devices, and fine-grained data packet loss analysis for sensor networks.

11:00-11:20 Coffee Break

11:20-13:00 Session 1: Cybersecurity

Chair: Prof. Wanlei Zhou

1. Mengmeng Yang, Tianqing Zhu, Yang Xiang and Wanlei Zhou: Personalized Privacy Preserving Collaborative Filtering
2. Mauro Conti, Fabio De Gaspari and Luigi V. Mancini: Know Your Enemy: Stealth Configuration-Information Gathering in SDN
3. Wenjuan Li, Weizhi Meng and Lam-For Kwok: SOOA: Exploring Special On-Off Attacks on Challenge-based Collaborative Intrusion Detection Networks
4. Marcello Trovati, Thomas Win, Quanbin Sun and Georgios Kononatsios: Assessment of Security Threats via Network Topology Analysis: An Initial Investigation
5. Maddalena Favaretto, Riccardo Spolaor, Mauro Conti and Marco Ferrante: You Surf So Strange Today: Anomaly Detection in Web services via HMM and CTMC

13:00-14:30 Lunch Break

14:30-16:30 Session 2: CRYPTOGRAPHY, SECURITY AND BIOMETRIC TECHNIQUES

Chair: Prof. Mauro Conti

1. Roberto De Prisco, Alfredo De Santis, Marco Manna: Reducing costs in HSM-based data centers
2. Chiara Galdi, Michele Nappi and Jean-Luc Dugelay: Secure User Authentication on Smartphones via Sensor and Face Recognition on Short Video Clips
3. Amal Ghorbel, Mahmoud Ghorbel and Mohamed Jmaiel: An hybrid Approach for Private Data Protection in the Cloud
4. Xiaoyu Zhang, Tao Jiang, Kuan-Ching Li and Xiaofeng Chen: New Publicly Verifiable Computation for Batch Matrix Multiplication
5. Wenbin Chen, Hao Lei, Jin Li, Chongzhi Gao, Fufang Li and Ke Qi: A Multi-source Homomorphic Network Coding Signature in the Standard model
6. Hamdi Ouechtati and Nadia Ben Azzouna: Trust-ABAC: Towards an access control system for the Internet of Things

14:30-16:30 1ST INTERNATIONAL WORKSHOP ON DIGITAL KNOWLEDGE ECOSYSTEMS

Chair: Prof. Giuliana Vitiello

1. L. N. C De Silva, J. S Goonetillake, G. N. Wikramanayake and A. Ginige: Harnessing Mobile Pervasive Computing to Enhance Livelihood Processes: Farmer Response to a Mobile Agriculture Information System
2. Marie D Fernando, Athula Ginige, and Ana Hol: Social Computing: New Pervasive Computing Paradigm to Enhance Triple Bottom Line: Social Computing: New Pervasive Computing Paradigm to Enhance Triple Bottom Line
3. Maneesh Mathai, Athula Ginige, Uma Srinivasan and Federico Girosi: Digital Knowledge Ecosystem for Empowering Users to Self-manage Diabetes through Context Specific Actionable Information (
4. Monica Sebillio, Giuliana Vitiello, Danilo Cuciniello and Serena Carrabs: Human-Centered Design of a Personal Medication Assistant - putting Polypharmacy Management into Patient's Hand!
5. Paloma Díaz, Teresa Onorati and Ignacio Aedo: A digital knowledge ecosystem to increase participation in emergency warnings and alerts management
6. Giovanni Acampora, Genoveffa Tortora and Autilia Vitiello: An Intelligent Framework for Predicting State War Engagement from Territorial Data

16:30-16:50 Coffee Break**16:50-18:30 Session 3: CRYPTOGRAPHY, SECURITY AND BIOMETRIC TECHNIQUES**

Chair: Prof. Zhe Liu

1. Neyire Deniz Sarier: Privacy Preserving Multimodal Biometric Authentication in the Cloud
2. Silvio Barra, Maria De Marsico, Michele Nappi, Fabio Narducci and Daniel Riccio: MOHAB: Mobile hand-based biometric recognition
3. Chun-Ta Li, Chin-Ling Chen, Cheng-Chi Lee and Chien-Ming Chen: Further Improvement on An Efficient and Secure Three-factor Based Authenticated Key Exchange Scheme using Elliptic Curve Cryptosystems
4. Feng Lu, Ruoxue Liu, Hai Jin and Fangming Liu: Improvement of Chord Algorithm for P2P IMS System
5. Jinhua Ma, Jianghua Liu, Min Wang and Wei Wu: An Efficient and Secure Design of Redactable Signature Scheme with Redaction Condition Control

18:45 Welcome Cocktail

On the Cetus Terrace

Friday, May 12, 2017

08:30-09:30 Registration

Attendance Kits available at the Conference Desk

09:30-10:30 Plenary Keynote 2: Developing and Assessing Information Granules for Intelligent Data Analysis and Decision-Making

Prof. Witold Pedrycz, Department of Electrical and, Computer Engineering, University of Alberta, Edmonton, Canada

Information granules play a pivotal role in acquiring, representing, processing, and communicating knowledge at a suitable level of abstraction. Designing information granules is central to all pursuits of Granular Computing. The talk offers a comprehensive and systematically structured overview of methodologies and algorithms of designing information granules along with a suite of representative applications in data analysis and decision-making. The taxonomy embraces two main categories of data-driven and knowledge-oriented approaches. We introduce and discuss a principle of justifiable granularity, which serves as a key design vehicle facilitating a formation of information granules completed on a basis of available experimental evidence. Recent advances of the principle are discussed as well; those include (i) a collaborative version of the principle supporting data analysis carried out in the presence of distributed data, (ii) context-based version of the principle incorporating auxiliary sources of knowledge, and (iii) its hierarchical version facilitating handling experimental evidence being available at several levels of specificity (abstraction). A collection of design scenarios motivating and supporting a formation of hierarchies of information granules of higher type and higher order is presented. The design of information granules comes with a thorough evaluation of their quality. A general taxonomy of several proposed performance indexes is being offered including a general granulation-degranulation approach along with ensuing optimization schemes. A number of application-specific performance indexes are considered including those emerging directly from the privacy-driven usage of information granules in data analysis. In the realm of data analysis, we discuss a collaborative mode of discovery of relationships and a granular summarization of findings quantified in the language of information granules. We advocate the role of information granules in group decision-making highlighting a mechanism of calibration of individual decision-making models augmented by a granular knowledge transfer.

10:30-10:50 Coffee Break

10:50-12:50 Session 4: MOBILE AND PERVASIVE COMPUTING

Chair: Prof. Florin Pop

1. Francesco Carrabs, Raffaele Cerulli, Ciriaco D'Ambrosio and Andrea Raiconi: Prolonging Lifetime in Wireless Sensor Networks with Interference Constraints
2. Mehrnoosh Monshizadeh, Vikramajeet Khatri, Raimo Kantola and Zheng Yan: An Orchestrated Security Platform for Internet of Robots
3. Anxi Wang, Shuzhen Pan, Chen Wang, Jian Shen and Dengzhi Liu: A Novel Clustering Solution for Wireless Sensor Networks
4. Alexandru-Valentin Vlăduță, Ion Bica, Victor-Valeriu Patriciu and Florin Pop: Reliable data collection for wireless sensor networks using unmanned aerial vehicles
5. Mocanu Bogdan, Florin Pop, Alexandra Mocanu, Ciprian Dobre, Valentin Cristea and Aniello Castiglione: Flaw recovery in cloud based bio-inspired Peer-to-Peer systems for smart cities
6. Leonardo C. Monteiro, Flavia Delicato, Luci Pirmez, Paulo Pires and Claudio De Farias: DPCAS: Data Prediction with Cubic Adaptive Sampling for Wireless Sensor Networks

10:50-12:50 1ST WORKSHOP ON CLOUD SECURITY MODELING, MONITORING AND MANAGEMENT (CS3M)

Chair: Prof. Valentina Casola

1. Alessio Merlo: BYODCert: Toward a Cross-Organizational BYOD paradigm
2. Smrati Gupta, Jaume Ferrarons-Llagostra, Jacek Dominiak, Victor Muntés-Mulero, Peter Matthews and Erkuden Rios: Security-centric framework for evaluation of IT services
3. Pamela Carvallo, Ana Cavalli, Wissam Mallouli and Erkuden Rios: Multi-cloud applications security monitoring
4. Massimiliano Rak and Salvatore Venticinquè: Secure microGRID in CCloud: The COSMIC Case study
5. Valentina Casola, Alessandra De Benedictis and Roberto Nardone: Towards model-based security assessment of cloud applications
6. Massimiliano Rak: Security Assurance of (multi-)cloud application with Security SLA composition
7. Parnian Najafi Borazjani: Cyber Threats in Cloud Computing

13:00-14:30 Lunch Break

14:30-16:30 Session 5: ADVANCED NETWORK SERVICES, ALGORITHMS, OPTIMIZATION

Chair: Prof. Mauro Migliardi

1. Shaoyu Dou, Xin Su, Dongmin Choi, Pankoo Kim and Chang Choi: A Study of Interference Cancellation for NOMA Downlink Near-far Effect to Support Big Data
2. Mauro Migliardi, Alessio Merlo, Sherenaz Al Haj Baddar and Francesco Palmieri: On dynamic latency sensitivity recognition, with an application to energy saving
3. Duoqiang Wang, Wei Dai, Chi Zhang, Xuanhua Shi and Hai Jin: TPS: An Efficient VM Scheduling Algorithm for HPC Applications in Cloud
4. Antonio Manzalini, Marco Di Girolamo, Giuseppe Celozzi, Fulvio Bruno, Giuliana Carullo, Marco Tambasco, Gino Carrozzo, Fulvio Risso and Gabriele Castellano: A Unifying Orchestration Operating Platform for 5G
5. Giuliana Carullo, Mario Di Mauro, Michele Galderisi, Maurizio Longo, Fabio Postiglione and Marco Tambasco: Object Storage in Cloud Computing environments: an availability analysis
6. Shuting Xu, Chase Wu, Aiqin Hou, Yongqiang Wang and Meng Wang: Energy-efficient Dynamic Consolidation of Virtual Machines in Big Data Centers

16:30-16:50 Coffee Break

16:50-18:30 Session 6: ADVANCED NETWORK SERVICES, ALGORITHMS AND OPTIMIZATION

Chair: Prof. Kuan-Ching Li

1. Flora Amato, Vincenzo Moscato, Antonio Picariello and Giancarlo Sperli: Influence maximization in Social Media Networks using hypergraphs
2. Guanghui Zhao, Xingyan Zi, Kaitai Liang, Yiyun Pan and Junwei Zhou: A Modified Segmentation Approach for Overlapping Elliptical Objects with Various Sizes
3. Andrea De Salve, Barbara Guidi, Paolo Mori, Laura Ricci and Vincenzo Ambriola: Privacy and temporal aware allocation of data in Decentralized Online Social Networks
4. Eva Garcia-Martin, Niklas Lavesson and Håkan Grahm: Identification of Energy Hotspots: A Case Study of the Very Fast Decision Tree
5. Francesco Carrabs, Carmine Cerrone, Raffaele Cerulli and Ciriaco D'Ambrosio: Improved upper and lower bounds for the close enough traveling salesman problem

18:30-19:30 Plenary Keynote 3: European General Data Protection Regulation: Game Changers and a Methodology for An Effective Compliance Approach

Dr. Paolo Balboni, President of the European Privacy Association, Founding Partner of ICT Legal Consulting, Belgium.

This keynote will discuss the new provisions of the Regulation (EU) 2016/679 and what they mean for intensive technology-related personal data processing (e.g., by means of cloud computing technologies, Internet of Things, Big Data and Analytics). With the new Regulation data protection compliance will become increasingly risk-based. We can identify a shift from data protection comprised of policies to data protection made of procedures as entities processing personal data will have to translate data protection compliance directly into industry processes (Data Protection by Design and by Default). Given this framework the end aim of the presentation is to share with the audience a methodology to set up an effective and comprehensive Data Protection Compliance Programme. Key topics of the presentations will be: (i) New principles set forth in the Regulation; (ii) Main duties and obligations for Controllers and Processors; (iii) The crucial role of the Data Protection Officer (DPO); (iv) How to carry out a Data Protection Impact Assessment (DPIA); (v) How to apply the principles of Data Protection by Design and by Default; (vi) How to manage Data Breaches and the related notification to the Supervisory Authority; (vii) New data subjects rights; (viii) Sanctions and remedies; (ix) How to set up an effective Data Protection Compliance Programme.

19:45 Banquet

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

Saturday, May 13, 2017

08:30-09:00 Registration

Attendance Kits available at the Conference Desk

09:00-10:00 Plenary Keynote 4: $\sum ((\text{Green, Pervasive, Cloud}) \text{ Computing}) = ?$

Prof. Athula Ginige, School of Information Technology, University of Western Sydney, Australia

In the past few years much advances have happened in Green Computing, Pervasive Computing and Cloud Computing. In this keynote I will explore how we can effectively combine these advances in different areas of computing to address some of the “Grand Challenges” or United Nations “Sustainable Development Goals (SDGs)” especially in areas of Food Security and Healthcare delivery. Growth in world population and the need to feed them, increasing life expectancy and the need to care for them, climate change, issues with fossil fuels among others have posed us a set of challenges often termed Grand Challenges. United Nations as a successor to its Millennium Goals have formulated 17 Sustainable Goals; “No Poverty”, “Zero Hunger” and “Good Health and Well-Being” being the first three. The advances in various aspects of computing can make a significant contribution towards finding sustainable solutions to these Grand Challenges. The question is how best to combine these advances to develop these solutions. To understand how advances in various computing aspects can be effectively combined to solve these Grand Challenges, 6 years ago, we embarked on a research project to develop a mobile based information system for agriculture domain. This system has now evolved into a Digital Knowledge Ecosystems for Agri-business and at present getting deployed among millions of farmers in India and Sri Lanka. Advances in pervasive computing have enabled us to connect with millions of users through their mobile phones and use in-built sensors to collect location specific data. Using this information user context can be computed. Cost effective cloud computing options enabled us to develop a large agriculture ontology and a corresponding knowledgebase that can be queried based on computed user context. This enabled us to generate “Actionable Information” in response to user queries which was provided to the users through their mobile devices. This empowered users to act and user actions were captured via the visual interfaces on the mobile and aggregated to derive situational knowledge. This situational knowledge is shared among the user community based on earlier computed context to empower them to make informed decisions that can lead to increased productivity, better economic out comes and sustainable growth. The growth of the farmer community attracted other major stakeholders in the domain such as Government Institutions, major agro chemical companies, micro finance organisations and potential buyers to be part of the Digital Knowledge Ecosystem fuelling its growth. The Digital Knowledge Ecosystem architecture that evolved is very generic and can be used to develop systems to solve many other Grand Challenges. For example we are now developing a system to manage type 2 Diabetes by replacing crop knowledgebase with a Knowledgebase on chronic diseases management. Another project we are currently working on is to develop a Digital Knowledge Ecosystem to manage child growth and related growth issues. We have also started a project to develop a “Mobile based Information System for Nutrition driven Agriculture” with a group of African Universities. In this keynote I will explain the underlying Digital Knowledge Ecosystem architecture, user centred scenario transformation approach that evolved when working on these projects and how advances in pervasive and cloud Computing can be effectively combines to achieve sustainable green solutions for betterment of humanity.

10:00-10:20 Coffee Break

**10:20-13:00 Session 7: PARALLEL AND DISTRIBUTED COMPUTING, 6.
ONTOLOGIES AND SMART APPLICATIONS**

Chair: Prof. Hai Jin

1. Alin Zhong, Shun Ren and Shouzhi Xu: CDLP: A core distributing policy based on logic partitioning
2. Xiaolu Zhang, Weidong Li, Xi Liu and Xuejie Zhang: A profit-maximum resource allocation approach for Mapreduce in data centers

3. Gianluca Roscigno, Giuseppe Cattaneo, Umberto Ferraro Petrillo, Michele Nappi and Fabio Narducci: An Efficient Implementation of the Algorithm by Lukáš et al. on Hadoop
4. Marisol García-Valls, Javier Ampuero-Calleja and Luis Lino Ferreira: Integration of Data Distribution Service and Raspberry Pi
5. Marisol García-Valls, Daniel Garrido and Manuel Díaz: Impact of middleware design on the communication performance
6. Jarmo Kalaoja: Semantic knowledge and service models for energy aware systems
7. Xiang Su, Pingjiang Li, Huber Flores, Jukka Riekkki, Xiaoli Liu, Yuhong Li and Christian Prehofer: Transferring Ontologies to the Edge of Internet of Things Systems

11:00-13:00 Tutorial 1: Preserving privacy in the digital age: Differential privacy and its applications

Prof. Wanlei Zhou, Dr Tianqing Zhu, School of Information Technology, Deakin University, Melbourne, Australia

Over the past two decades, digital information collected by corporations, organisations and governments has created huge amount of datasets, and the speed of such data collection has increased exponentially over the last a few years because of the pervasiveness of computing devices. However, most of the collected datasets are personally related and contain private or sensitive information. Even though curators can apply several simple anonymization techniques, there is still a high probability that the sensitive information of individuals will be disclosed. Privacy-preserving has therefore become an urgent issue that needs to be addressed in the digital age. Differential privacy is one of the most prevalent privacy models because it provides a rigorous and provable privacy notion that can be implemented in various research areas. In this presentation, we will start with privacy breaches and privacy models, and introduce the basic concept of differential privacy. We then will focus on the applications of differential privacy in various scenarios in which we have been working on, including Location privacy, Recommender systems, Tagging systems, and Correlated datasets. We will then finalise the talk by outlining the privacy challenges in the era of big data.

13:00-14:30 Lunch Break

14:30-16:30 Session 8: HEALTHCARE SUPPORT SYSTEMS AND SMART APPLICATIONS

Chair: Dr. Marcello Trovati

1. Saverio Lemma, Marco Lombardi, Francesco Pascale and Fabio Clarizia: A Mobile Context-Aware Information System to support tourism events
2. Saverio Lemma, Marco Lombardi, Francesco Pascale and Fabio Clarizia: An Ontological Digital Storytelling to enrich tourist destinations and attractions with a mobile tailored story
3. Guan-Chen Li, Chin-Ling Chen, Feng Lin, Jungpil Shin and Cheng Gu: Design of a Secure Emergency Communication System Based on Cloud for Pregnancy
4. Alexandra Mocanu, Ciprian Dobre, Bogdan Mocanu, Florin Pop, Valentin Cristea and Christian Esposito: A trust application in participatory sensing: Elder reintegration
5. Ye Li, Kaitai Liang, Chunhua Su and Wei Wu: DABEHR: Decentralized Attribute-Based Electronic Health Record System with Constant-Size Storage Complexity
6. Omar Behadada, Meryem Abi-Ayad, Marcello Trovati and Georgios Kontonatsios: Automatic Diagnosis Metabolic Syndrome via a k-Nearest Neighbour Classifier

16:30-20:30 Social Event: Visit to the surroundings

The sessions are held in Sala "Sole Luna" (Room 1), 3rd floor and Sala "Gabbiano" (Room 2), 1st floor

Time Table

Thursday (May 11, 2017)			
Slot	Time	Room 1 "Sole Luna"	Room 2 "Gabbiano"
Registration	08:30 – 09:30	Registration	
Opening	09:30 – 10:00	Opening Ceremony	
Keynotes	10:00 – 11:00	GPC-2017 Keynote 1 Elisa Bertino	
Coffee Break	11:00 – 11:20	Coffee Break	
Sessions	11:20 – 13:00	Session 1	
Lunch	13:00 – 14:30	Lunch	
Parallel Sessions	14:30 – 16:30	Session 2	1st DKE WS
Coffee Break	16:30 – 16:50	Coffee Break	
Sessions	16:50 – 18:30	Session 3	
Welcome Cocktail	18:45 – 20:30	Welcome Cocktail	

Friday (May 12, 2017)			
Slot	Time	Room 1 "Sole Luna"	Room 2 "Gabbiano"
Registration	08:30 – 09:30	Registration	
Keynotes	09:30 – 10:30	GPC-2017 Keynote 2 Witold Pedrycz	
Coffee Break	10:30 – 10:50	Coffee Break	
Parallel Sessions	10:50 – 12:50	Session 4	1st CS3M WS
Lunch	13:00 – 14:30	Lunch	
Sessions	14:30 – 16:30	Session 5	
Coffee Break	16:30 – 16:50	Coffee Break	
Sessions	16:50 – 18:30	Session 6	
Keynotes	18:30 – 19:30	GPC-2017 Keynote 3 Paolo Balboni	
Gala Dinner	19:45 – 21:30	Gala Dinner	

Saturday (May 13, 2017)			
Slot	Time	Room 1 "Sole Luna"	Room 2 "Gabbiano"
Registration	08:30 – 09:00	Registration	
Keynotes	09:00 – 10:00	GPC-2017 Keynote 4 Athula Ginige	
Coffee Break	10:00 – 10:20	Coffee Break	
Parallel Sessions	10:20 – 13:00	Session 7	GPC-2017 Tutorial 1 Wanlei Zhou
Lunch	13:00 – 14:30	Lunch	
Sessions	14:30 – 16:30	Session 8	
Social Events	16:30 – 20:30	Visit to Amalfi	

Sunday (May 14, 2017)			
Slot	Time	Room 1 "Sole Luna"	
Session 1	10:00 – 13:00	Chairs and Steering Committee Meeting	