GECON 2018

September 18–20
Pisa, Italy

Conference Program

Tuesday 18

10:00 - 11:00   **Coffee and Registration**

11:00 - 11:30   **Introductory Remarks**

Welcome to Pisa and the CNR
Emanuele Carlini, Massimo Coppola

Introduction to GECON conference series
José Ángel Bañares, Jörn Altmann

11:30 - 12:30   **Keynote 1**
                    How does the new memory hierarchy affect the Cloud model?
                    Prof. Antonio Cisternino, University of Pisa

12:30 - 13:30   **Lunch Break**

13:30 - 15:20   **Session 1: Special Topic Session on Machine Learning, Cognitive Systems and Data Science for System Management**
                    Chair: Aurilla Aurelie Arntzen

FaaStest - Machine Learning based Cost and Performance FaaS Optimization.
Shay Horovitz, Roei Amos, Ohad Baruch, Tomer Cohen, Tal Oyar, and Afik Deri

Secure Query Processing over Encrypted Data using a Distributed Index Structure for Outsourcing Sensitive Data.
Hyunjo Lee, Hyeonguk Ma, Youngho Song and Jae-Woo Chang

An empirical study on performance server analysis and URL phishing prevention to improve system management through machine learning.
Antonio J. Tallón-Ballesteros, Simon James Fong and Raymond Kwok-Kay Wong

Using machine learning for identifying ping failure in Large Network Topology.
Aurelie Aurilla Arntzen Bechina, Maged Helmy and Arvid Siqveland

15:20 - 15:50   **Coffee Break**

15:50 - 16:50   **Session 2: Software and Services for Education**

A Market Based resource trading in a multi-Campus Compute Co-operative (CCC).
Md Anindya Prodhan and Andrew Grimshaw

Snooping around a Fence: A Lesson from the Education Sector in a Software Service Ecosystem.
Djamshid Sultanov, Kibae Kim and Jörn Altmann

16:50 - 17:30   **Invited talk: Open Science as-a-Service for repositories and research communities**
                    Dr. Alessia Bardi, ISTI-CNR

Wednesday 19

9:30 - 10:30   **Keynote 2: Microservices everywhere?**
                        Prof. Antonio Brogi, University of Pisa

10:30 - 11:00   **Coffee Break**

11:00 - 12:30   **Session 3: Special Topic on Blockchain Technologies and Economics**
                        Chairs: Dr. Paolo Mori and Prof. Stefano Bistarelli

Smart contracts for container based video conferencing services: Architecture and implementation.
Sandi Gec, Dejan Lavbič, Marko Bajec and Vlado Stankovski

Deploying blockchains for a new paradigm of media experience.
Georgios Palaiokrassas, Antonios Litke, Georgios Fragkos, Vasileios Papaefthymiou and Theodora Varvarigou

Is arbitrage possible in the Bitcoin market?
Stefano Bistarelli, Alessandra Cretarola, Gianna Figà-Talamanca, Ivan Mercanti and Marco Patacca

12:30 - 13:30   **Lunch Break**

13:30 - 15:00   **Session 4: Special Topic on IT Service Ecosystems enabled through Emerging Digital Technologies**
                        Chair: Somayeh Koohborfardhaghighi

Business Model Characteristics for Local IaaS Providers for Counteracting the Dominance of the Hyperscalers.
Sebastian Floerecke and Franz Lehner

Delivering a Systematic Framework for the Selection and Evaluation of Startups.
Somayeh Koohborfardhaghighi and Ece Erdogan

Service User Perspectives on Delivering Social Innovation: An Implication of the Internet of Things for Business.
Somayeh Koohborfardhaghighi and Olga-Maria Plessa

Open Discussion

15:00 - 15:30   **Coffee Break**

15:30 - 17:00   **Session 5: Work in Progress Papers**

Statistical Model Based Cloud Resource Management.
Mitalee Sarker and Stefan Wesner

Network Externalities in Cybersecurity Information Sharing Ecosystems.
Zahid Rashid, Umara Noor and Jörn Altmann

AMFC tool: Auditing and Monitoring in Cloud.
Leandro Pauro, Roberta Spolon, Gustavo Bruschi, Aleardo Manacero, Renata Lobato and Marcos Cavenaghi

Open Discussion

17:00 - 23:00   **Social Program, please see the last page for details**

Thursday 20

9:30 - 11:00   **Session 6: Auctions in Clouds**

Applying Auctions to Bank Holding Company Software Project Portfolio Selection.
David Gerstl

Preventing Collusion in Cloud Computing Auctions.
Shunit Agmon, Orna Agmon Ben-Yehuda and Assaf Schuster

Why are repeated auctions in RaaS clouds risky?
Danielle Movsowitz, Liran Funaro, Shunit Agmon, Orna Agmon Ben-Yehuda and Orr Dunkelman

11:00 - 11:15   **Coffee Break**

11.15 - 12:15   **Session 7: Simulation and Modelling**

Model and Simulation Engines for Distributed Simulation of Discrete Event Systems.
Jose Manuel Colom and Jose Angel Bañares

An HVAC Regulation Architecture for Smart Building Based on Weather Forecast.
Hanna Kavalionak and Emanuele Carlini

12:15 - 12:45   **Closing Remarks and GECON 2019 Presentation**

Social events on Wednesday 19

17:00 - 20:00   **Guided Tour of the Ancient Walls and Piazza dei Miracoli**
We will depart from the CNR premises at the end of the sessions, and use public transportation to reach the entrance of the Ancient Walls in Largo Bruno Pontecorvo 3, inside the University premises. The guided tour starts from there at 17.30.

The social dinner location is near Piazza dei Miracoli, very close to the end of our tour.

20:00   **Social dinner**
Location: Grand Hotel Duomo, Via Santa Maria 94.