Call for Papers (Extended deadline) – GECON 2018
15th International Conference on Economics of Grids, Clouds, Systems & Services
http://2018.gecon-conference.org
18-20 September 2018, Pisa, Italy

[Apologies if you got multiple copies of this email]
Extended deadline and Call for Papers

Scope
GECON 2018 builds upon the very successful tradition of the conference previous editions since 2003, (http://www.gecon-conference.org). GECON solicits contributions that are interdisciplinary, combining business and economic aspects with engineering and computer science related themes. Contributions to this conference can include extensions to existing technologies, successful deployments of technologies, economic analyses, analyses of technology adoptions, and theoretical models. We welcome papers that combine micro- and macro-economic principles with resource management strategies in computer science and engineering. Case studies, which demonstrate practical use of economic strategies, benefits and limitations, are particularly encouraged. The purpose of this event is to gather original work and build a strong multidisciplinary community in this increasingly important area of a future information and knowledge economy.
Upon request from several authors, we are extending the deadlines for submitting abstracts and full contributions.

Important Dates
Extended Abstract Submission Deadline: May 27th, 2018
Extended Paper and Paper-in-Progress Submission Deadline: June 4th, 2018
Notification of Paper and Paper-in-Progress Acceptance: ~~June 15th~~ June 25th, 2018
Camera-Ready Deadline: ~~June 22nd~~ July 2nd, 2018

Poster Submission Deadline: June 15th, 2018
Notification of Poster Acceptance: June 21st, 2018
Camera-Ready Poster Deadline: June 24th, 2018

Venue
GECON 2018 will be held in Pisa, Italy, from Tuesday to Thursday 18-20/09, within the Research Premises of the Italian National Research Council (CNR).

Publication and Submission Guidelines
Original full papers and work-in-progress papers, which are not currently under review by another conference, will be considered. Manuscripts will be reviewed based on technical merit, originality, and relevance. Past acceptance rates have been around 30% in recent years.

Full papers, work-in-progress papers, and poster abstracts shall be submitted using the Springer LNCS format. Submitted full papers should not exceed 12 pages, work-in-progress

papers should not exceed 8 pages (including references and appendices) and poster abstracts (4 pages).

For further details, visit the GECON 2018 Web page. Paper submissions for the general conference track and for the special sessions are all managed through EasyChair at (https://easychair.org/conferences/?conf=gecon2018).

The proceedings will be published by Springer LNCS. Extended versions of up to 10 accepted papers in the Computer Science field will be invited for publication in a special issue of the Elsevier Journal of Future Generation Computing Systems. For papers targeting mainly business and economic aspects, a special issue of the Springer Electronic Markets Journal with up to 5 papers is foreseen.

Topics of Interest

Advances in distributed systems technology have allowed for the provisioning of IT services on an unprecedented scale and with increasing flexibility. As a global market for infrastructures, platforms and software services emerge the need to understand and deal with these implications, and a multitude of new challenges is quickly growing. Therefore, the general topics of interest at GECON 2018 are:

- Software service platforms and networked systems
- Analysis of software industry and cloud computing industry
- Market mechanisms, auctions models, and bidding languages
- Decision support for service selection and procurement
- Revenue and energy-aware resource management
- Pricing schemes, service level agreements (SLAs), and revenue models
- Negotiation, enforcement and monitoring of service level agreements
- Open source ecosystem
- Economically efficient resource allocation, scheduling, and capacity planning
- Automated trading and bidding support tools
- Incentive design, strategic behavior & game theory
- Development of sustainable infrastructures
- Desktop grids, volunteer computing and crowd-sourcing
- Metering, accounting, and billing
- Business models and strategies for SMEs
- Trust, reputation, security, and risk management
- Reports and analysis on operational markets and test-beds
- Economics of big data, software, services, service composition, and selection
- Cost modeling, cost-benefit analysis
- Performance monitoring, optimization and prediction
- Community networks, social network systems, and resource sharing models
- Techno-economic analysis: Emerging computing paradigms (fog, edge, osmosis computing), and technologies (micro-services, containers)
- Efficient resource management based on different virtualization technologies
- Cross-technology, self-managing mechanisms, tooling to increase productivity in Platform-as-a Service environments.
- Smart grids, smart cities, smart buildings, energy-aware infrastructures and services
- Standardization, interoperability, and legal aspects
- Economics of IaaS, SaaS, PaaS and Federation of resources

- Economic modeling of networks, systems, software, and data
- Service Science
- Clouds & Services for Internet-of-Things
- Computational and economic aspects of blockchain
- Machine learning, Cognitive Systems and Data Science for system management

GECON 2018 is running three special sessions this year:

Special Session on *IT Service Ecosystems enabled through Emerging Digital Technologies*

Using technologies including open APIs, digital platforms, IoT, wearable technology, and cloud computing, new business ecosystems become possible. Well-functioning and innovative digital businesses in this ecosystem continuously monetize, manage, and measure information as an asset for having a competitive advantage in the market. The ecosystems are based on a new way of integration of people, resources, processes, and technologies. This also affects the management of systems and resources (e.g., network management and cloud management). Techno-economic analyses (e.g., value creation modeling) are vital for understanding the requirements for an uninterruptible operation of infrastructure, the needs for future technologies, sustainable business operation, and a society that benefits. In this call, we are inviting submissions of papers in the following areas:

- Software ecosystems
- IT service platforms
- Digital business model innovation (opportunities and barriers)
- New value creation models over new technologies such as cloud computing, IOT, wearable
        Tech, blockchain
- Digital transformation and event thinking
- Open source software
- Implementations of distributed business logics
- Digital process re-engineering
- Data-driven business model innovation (Acceptance and Barriers)
- Social Impact of Digital Business Transformations
- Software service systems

 Contact : Somayeh Khaghighi (Amsterdam University , Netherlands)
    - skhaghighi@gmail.com

Special Session on *Machine* **learning, Cognitive Systems and Data Science for system management**

It is well recognized in this digital world, businesses, government, and people depend on reliable technical infrastructure for all aspects of daily operations such as Real Estate, Banking, retail, transportation and even socializing. And today, with the growing trend for the

internet of thing, demands for a safe management system has tremendously increased. Infrastructure failures are expensive, e.g., network downtime or outages should be avoided by all means as it might impact business operations and might, also, generate a tremendous cost due to the Mean Time to Repair in Network Infrastructure (MTR). There are many reasons why infrastructure such computers, devices, network, Information systems management failures occur. According to some studies, human errors account is often cited. Therefore, several studies focus on defining new approaches that could help to automate some of the operation function of the systems management. Today, the emerging trend is to use techniques from Artificial Intelligence such as Machine Learning and data science in order to increase systems Management performance. In this call, we are inviting submissions of papers in the following areas:

- Machine Learning and their potential applications in Systems Management
- Self-Autonomous System Management
- Network, Devices and Computers Management
- IT and IoT Infrastructure
- Software as a Service
- AI & Cloud computing
- Robots, drones network management
- Advanced Software for Managed Service Providers

Contact: Aurilla Aurelie Arntzen (University of South-Eastern, Norway)
   - Aurilla.Aurelie.Arntzen@usn.no

Special Session on Blockchain Technologies and Economics

The blockchain technology is raising increasing expectations, with many promising applications being proposed in several fields that go far beyond the crypto-currency applications that have popularized the technology.
The special session on Blockchain Technology and Economics will focus on the theory and the applications of Blockchains to systems and service infrastructures, their impact on the economics and management of these services, the performance and modeling of blockchain based systems, the viability of new economic and business models, as well as on issues that stem from the new applications and involve essential properties of the affected systems, including but not limited the legal, privacy and security viewpoints. This special sessions invites submissions related to:

- Privacy and anonymity on blockchain
- Smart Contracts
- Smart Contracts analysis
- Performance of blockchain based systems
- Scalability of blockchain based systems
- Lightweight protocols based on blockchain
- Attacks on blockchain based systems
- Transactions analysis
- Energy consumption issues

- Blockchain in Grid and Cloud systems
- Other applications of the Blockchain Technologies
- Economics and technological evaluation of blockchain application to service infrastructures
- Legal aspects of blockchains

Contacts:

Paolo Mori (CNR-IIT, Italy)
    - paolo.mori@iit.cnr.it

Stefano Bistarelli (University of Perugia, Italy)
    - bista@dmi.unipg.it

Conference Organization

Conference Chair

- Massimo Coppola (ISTI-CNR, Italy) - massimo.coppola@isti.cnr.it
- Emanuele Carlini (ISTI-CNR, Italy) - emanuele.carlini@isti.cnr.it

Conference Vice-Chairs

- Jörn Altmann (Seoul National University, South-Korea)
- José Ángel Bañares (University of Zaragoza, Spain)
- Karim Djemame (University of Leeds, UK)
- Congduc Pham (University of Pau, France)

Proceedings Chair

- Daniele D'Agostino (IMATI-CNR, Genova, Italy)

Industrial Session Chair

- Patrizio Dazzi (ISTI-CNR, Italy)

Steering Committee

- Jörn Altmann (Seoul National University, South-Korea)
- Jose Angel Bañares (Zaragoza University, Spain)
- Steven Miller (Singapore Mgnt University, Singapore)
- Maria Nikolaidou (Harokopio University of Athens, Greece)
- Omer F. Rana (Cardiff University, UK)
- Gheorghe Cosmin Silaghi (Babes-Bolyai University, Romania)
- Konstantinos Tserpes (Harokopio University, Greece)

Program Committee

- Alvaro Arenas (IE University, Spain)

- Aurilla Aurelie Arntzen - University of South-Eastern Norway, Norway
- Ashraf Bany Mohammed (The University of Jordan, Jordan)
- Ivona Brandic (Technical University of Vienna, Austria)
- Rajkumar Buyya (University of Melbourne, Australia)
- Georg Carle (Technical University of Munich, Germany)
- Costas Courcoubetis (sutd, Greece)
- Alex Delis (University of Athens, Greece)
- Patricio Domingues (ESTG - Leiria, Portugal)
- Giancarlo Fortino (University of Calabria, Italy)
- Felix Freitag (UPC, Spain)
- Marc Frincu (West University of Timisoara, Romania)
- Daniel Grosu (Wayne State University, USA)
- Netsanet Haile (Seoul National University, South-Korea)
- Chun-Hsi Huang (University of Connecticut, USA)
- Bahman Javadi (Western Sydney University, Australia)
- Odej Kao (TU Berlin, Germany)
- Stefan Kirn (Univ. Hohenheim, Germany)
- Bastian Koller (HLRS - University of Stuttgart, Germany)
- Somayeh Koohborfardhaghighi (University of Amsterdam, The Netherlands)
- George Kousiouris (National Technical University of Athens, Greece)
- Dieter Kranzlmüller (Ludwig Maximilian University of Munich, Germany)
- Dimosthenis Kyriazis (National Technical University of Athens, Greece)
- Jörg Leukel (Univ. Hohenheim, Germany)
- Dan Ma (Singapore Management University, Singapore)
- Richard Ma (National University of Singapore, Singapore)
- Roc Meseguer (Universitat Politècnica de Catalunya, Spain)
- Mircea Moca (Babes-Bolyai University of Cluj-Napoca, Romania)
- Maurizio Naldi (Università di Roma Tor Vergata, Italy)
- Leandro Navarro (UPC, Spain)
- Marco Netto (IBM, Italy)
- Frank Pallas (KIT - Karlsruhe Insitute of Technology, Germany)
- George Pallis (Dpt. of Computer Science, University of Cyprus, Cyprus)
- Dana Petcu (West University of Timisoara, Romania)
- Ioan Petri (Cardiff University, UK)
- Radu Prodan (University of Innsbruck, Austria)
- Ivan Rodero (Rutgers University, USA)
- Rizos Sakellariou (The University of Manchester, UK)
- Benjamin Satzger (Microsoft, USA)
- Lutz Schubert (OMI, University of Ulm, Germany)
- Jun Shen (University of Wollongong, Australia)
- Mathias Slawik (TU Berlin, Germany)
- Aleksander A. Slominski (Thomas J. Watson Research Center, USA)
- Stefan Tai (TU Berlin, Germany)
- Rafael Tolosana-Calasanz (Universidad de Zaragoza, Spain)
- Bruno Tuffin (INRIA, France)
- Iraklis Varlamis (Department of Informatics and Telematics, Harokopio University of Athens, Greece)
- Claudiu Vinte (Bucharest University of Economic Studies, Romania)
- Stefan Wesner (HLRS, Germany)

- Phillip Wieder (Gesellschaft fuer wissenschaftliche Datenverarbeitung mbH Goettingen, Germany)
- Ramin Yahyapour (Gesellschaft fuer wissenschaftliche Datenverarbeitung mbH Goettingen, Germany)
- Dimitrios Zissis (University of the Aegean, Department of Product and Systems Design Engineering, Greece)
- Jeremy Cohen (Imperial College London, UK)
- Saurabh Garg (IBM Research, USA)
- Thomas Hess (Ludwig-Maximilians-Universitet Munchen, Germany)
- Tobias Knoch (Erasmus University, Netherlands)
- Harald Kornmayer (Duale Hochschule Baden-Wuerttemberg Mannheim, Germany)
- Leonardo Maccari (University of Trento, Italy)
- Dirk Neumann (University of Freiburg, Germany)
- Rubem Pereira (Liverpool John Moores University, UK)
- Peter Reichl (Telecommunications Research Center Vienna, Austria)
- Arunabha Sen (Arizona State University, USA)
- Burkhard Stiller (University of Zurich, Switzerland)
- Dora Varvarigou (National Technical University of Athens, Greece)
- Luis Veiga (Universidade de Lisboa, Portugal)
- Ivan Breskovic (Technical University of Vienna, Austria)
- Nikolaus Forgo (University of Hannover, Germany)
- Haiwu He (Chinese Academy of Science, Beijing, China)
- Matthias Hovestadt (Hanover University of Applied Sciences, Germany)
- Byungtae Lee (KAIST, South-Korea)
- Marin Litoiu (Electrical Engineering and Computer Science, Lassonde School of Engineering, Canada)
- Syed Naqvi (Birmingham City University, UK)
- Dang Minh Quan (CREATE-NET, Germany)
- Rajiv Ranjan (University of Melbourne, Australia)
- Satoshi Sekiguchi (AIST, Japan)
- Kwang Mon Sim (University of Kent, UK)
- Katarina Stanoevska (University of St.Gallen, Switzerland)
- Ruediger Zarnekow (TU Berlin, Germany)
- Wolfgang Ziegler (Fraunhofer, Germany)