GECON 2020

17th International Conference on the Economics of Grids, Clouds, Systems and Services

15-17 September 2020
Izola, Slovenia

Scope

GECON 2020 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.

GECON 2020 solicits full papers, work-in-progress (WIP) papers and wild-and-crazy-idea (WACI) papers. Original full papers present completed research that is original and contains new ideas or methodologies. The paper illustrates results that demonstrate the performance of the research. Original WIP papers present research that addresses a challenging research question but does not necessarily contain a completed analysis. Original WACI papers present a new idea about a method, technology, hardware, or software that has not been implemented or cannot even be implemented with the current state-of-the-art in technology.

After the success of the last edition, GECON will include a poster session. Posters may be submitted directly to the poster session. In addition, to improve work exposure and human interaction, any accepted paper and paper-in-progress is entitled and encouraged to present a poster.

Important Dates and Note

If the corona virus countermeasures are still in place until September, GECON 2020 will only be performed online via an online conferencing system. However, if the corona virus countermeasures have been lifted by September, GECON 2020 will take place in Izola but will also offer the option for authors of accepted papers to give online presentations. Consequently, the proceedings of the GECON 2020 will still be published in the LNCS series of Springer as announced.

Deadlines for full papers, WIP papers, and WACI papers are:
- Abstract Submission of full, WIP and WACI papers: Deadline: **May 18th, 2020**
- Full Paper, WIP Paper, and WACI Paper Submission Deadline: **May 25th, 2020**
- Notification of Acceptance: **June 29th, 2020**
- Camera-Ready Deadline: **July 6th, 2020**
- Poster Submission Deadline for Accepted Papers: **July 20th, 2020**

Deadline for Special session proposals: **April 15th, 2020**

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 wild-and-crazy-ideas papers shall be submitted using the Springer LNCS format. Submitted full papers should not exceed 12 pages, WIP papers should not exceed 8 pages (including references and appendices) and WACI papers (4 pages). For further details, visit the GECON 2020 Web page. Paper submissions are managed through EasyChair at (https://easychair.org/conferences/?conf=gecon2020).

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 interdisciplinary challenges is quickly growing. Therefore, GECON encourages the submission of papers which combine at least one economic/legal area and one technologic area. GECON's list of areas includes, but is not limited to:

Economics

- Incentive design, strategic behavior & game theory
- Market mechanisms, auctions models, and bidding languages
- Economic efficiency
- (Techno) Economic analysis and modelling
- Pricing schemes and revenue models
- Metering, accounting, and billing
- Cost-benefit analysis
- Automated trading and bidding support tools
- Trust, reputation, security, and risk management
- Performance monitoring, optimization, and prediction
- Analysis and reports on industry, test-beds and operational markets
- Energy efficiency, sustainability
- Business models and strategies, decision support

Law and Legal aspects

- Standardization, interoperability, and legal aspects
- Service level agreements (SLAs), negotiation, enforcement and monitoring
- Open source ecosystems
- Privacy

Clouds, Grids, Systems and Services

- IaaS, SaaS, PaaS and Federation of resources
- Vertical scaling, burstable computing, vertical elasticity
- Resource management: allocation, sharing, scheduling, and capacity planning
- Virtualization and Containers
- Service Science, Management and engineering (SSME)
- Software engineering
- Security

Technologies Transforming the Economy

- Smart grids, cities or buildings
- Energy-aware infrastructures and services
- Fog and edge computing
- Micro-services, Serverless computing
- Internet-of-Things
- Blockchains
- Community networks
- Social networks
- Big data
- Data stream ingestion and complex event processing

Call for Special and Birds of a Feather sessions

GECON 2020 looks for proposals for special sessions. With the objective of encouraging **alternative forms of participation** that can increase the opportunity to discuss technical topics in an atmosphere that fosters the active exchange of ideas we solicit **special topic and Birds of a Feather session proposals**.

The special sessions program seeks to provide venues for specialist groups to meet, to generate focused discussion on specific sub-areas within the economics of distributed systems, and to engage in community-building activities. Special sessions should provide a discussion forum for researchers in topics related to topics of the conference, either on specific research themes, or in emerging areas of research. Birds of a feather session seeks promote discussions to spark an attendee-organized exploration or collaboration on a topic impacting your work or industry.

Both, birds of a feather and special topic sessions can be used, for example, for giving the opportunity all participants to present intermediate/final results of projects, finding partners to establish collaborative research and innovation projects, or PhD students to present and discuss their dissertations with fellow PhD students, senior scholars and industry participants. Session proposals should describe briefly objectives or purposes of the proposed discussion, importance of the topic and strategies to facilitate participation in the discussion.

With respect to publications of special session works, these papers will be assigned to the special topic session chair for evaluation. Special sessions works can include a set of a long abstract about the special session, technical reports, future research visions, and exhibition tool descriptions with informal demonstrations. Regular, original, and reviewed works will be included in the Springer LNCS proceedings.

Currently, the following special topic sessions have been lined up:

- ***Digital Infrastructures to Support Decision Making for Pandemic Response and Countermeasures***.
  Contact: The GECON 2020 Chair and Vice-Chairs, gecon2020@easychair.org

- ***Decentralising Clouds to Deliver Intelligence at the Edge.***
  Contact: Seugwoo Kum (Korean Electronics Technology Institute, Korea) seungwoo.kum@gmail.com and Domenico Siracusa (Fondazione Bruno Kessler, Italy) dsiracusa@fbk.eu.

- ***Sustainability of Digital Infrastructures: Social, Economic, and Policy Aspects for Material Resources Supporting the Digital World***. Contact: Leandro Navarro (Universitat Politècnica de Catalunya, Spain), leandro@ac.upc.edu; Felix Freitag (Universitat Politècnica de Catalunya, Spain), felix@ac.upc.edu

- ***Business and Economic Aspects of Machine Learning, Cognitive Systems and Data Science***. Contact: Aurilla Aurelie Arntzen (University of South-Eastern, Norway), aurilla.aurelie.arntzen@usn.no

Conference Organization

Conference Chair
- Vlado Stankovski (University of Ljubljana, Slovenia)

Conference Vice-Chairs
- Karim Djemame (University of Leeds, UK)
- Orna Agmon Ben-Yehuda (University of Haifa, Israel)
- Jörn Altmann (Seoul National University, South-Korea)
- José Ángel Bañares (Zaragoza University, Spain)

Steering Committee
- Karim Djemame (University of Leeds, UK)
- Jörn Altmann (Seoul National University, South-Korea)
- Jose Ángel Bañares (Zaragoza University, Spain)
- Orna Agmon Ben-Yehuda (Technion, Israel)
- Steven Miller (Singapore Management University, Singapore)
- Omer F. Rana (Cardiff University, UK)
- Gheorghe Cosmin Silaghi (Babes-Bolyai University, Romania)
- Konstantinos Tserpes (Harokopio University of Athens, Greece)
- Maurizio Naldi (Università di Roma, Italy)

Contact for Questions on the Submission Process: gecon2020@easychair.org