



# Call for Papers

## 9<sup>th</sup> International Workshop (ITER 2021) Information Technology in Economic Research

Co-located with the 17<sup>th</sup> International Conference  
on **ICT in Education, Research, and Industrial Applications:**  
Integration, Harmonization, and Knowledge Transfer (ICTERI 2021)

September 28, 2021, Kherson - Ukraine  
<http://icteri.org/icteri-2021/workshops-calls-for-papers/iter-2021/>

Proceedings: CEUR-WS, indexed by Scopus  
Post-proceedings: Springer CCIS (acceptance pending), indexed by:  
Scopus, Web of Science, EI-Compendex, DBLP, Mathematical Reviews, SCImago,



Venue: Kherson State University

### ITER 2020 at a Glance

ITER is an annual peer-reviewed international workshop focusing on research advances, business/academic applications of information and communication technologies related to solving practical economic problems and advancing economic research. ITER puts its emphasis on real world applications of ICT solutions in economics. Therefore, all contributors are strongly encouraged to demonstrate how and for what purpose the proposed solutions are to be used. Examples could be economic case studies involving new tools and/or methodological approaches, experimental studies with usable economic applications, or surveys revealing new IT applications and trends in economic research and practice.

ITER is designed to offer a meeting point for intensive scientific exchange among researchers and experts in emerging technologies from computer science, business computing and information system areas in emerging technologies interested in a focused look into IT in economic research related to the design, development, implementation, use and management of emerging technologies, real world business applications and the move to a digital economy.

It is a bridge linking researchers from computer science, business computing and information system areas to real world business applications for digital economics and digital industry organization. It is an opportunity to explore ideas, exchange thoughts and implement research projects between these diverse fields with a focus on application contexts like e-commerce, e-business, and e-governance.

The ITER 2021 program will include a panel discussion and presentations on completed work and works in progress. The workshop will last one full day.

### Important Dates

(23:59 Hawaii time)

Monday, 17.05.2021 – submission of workshop papers  
Monday, 28.06.2021 - acceptance notification for workshop papers  
Monday, 28.08.2021 - submission of camera ready papers  
Saturday, 28.08.2021 - registration deadline  
Tuesday, 28.09.2021 – Workshop Day

### No Fees

WS ITER does not charge any conference fee. Participation is FREE; meeting facilities and service expenses are covered by our sponsors.

### History of Workshop ITER

ITER 2020 (<http://icteri.org/icteri-2020/workshops-calls-for-papers/iter-2020/>)

ITER 2019 (<http://icteri.org/icteri-2019/workshops/iter-2019-workshop-program/>)

ITER 2018 (<http://icteri.org/icteri-2018/workshops/iter-2018-workshop-program/>)

ITER 2016 (<http://www.icteri.org/workshop-iter2016>)

ITER 2015 (<http://www.icteri.org/workshop-ITER2015>)

ITER 2014 (<http://www.icteri.org/page/workshop-iter2014>)

ITER 2013 (<http://www.icteri.org/workshops-icteri-2013/workshop-iter>)

ITER 2012 (<http://icteri.org/page/workshop-iter>)

### The Scope of ITER

The use of computer programs in all sorts of economic simulations has become increasingly popular in the last years, producing a wide variety of interesting applications for economics, finance and business.

The goals of the workshop are: (1) to help economists use IT in economic research and practice, in particular for simulation and forecasting; (2) to improve and refine the use of IT in the context of digital economics. The workshop is particularly designed for researchers, PhD students, master's students, industry practitioners and experts.

ITER 2021 invites papers on, but not strictly limited to, the following topics:

**Fuzzy Logic and Neural Network Forecasting for Digital Economics and Digital Business Models:** development of the theory and methodology of neural networks and fuzzy logic in economics, practical solutions for specific economic construction applications within economic and mathematical models, and experimental studies on their effectiveness, contributions on how humans represent and use incomplete and uncertain data and knowledge in decision making neuromarketing ICT techniques, and machine learning techniques in business.

Digital advancements which can lead to the development of important applications such as digital currencies, blockchains; business model innovation, servitization with digital technologies, cloud-based architecture of enterprises, digital transformation of business models which lead to new ways of doing business, scalability of digital business models.

**Data Science and Big Data in Evolutionary and Simulation Economics Under Sustainable Development:** evolutionary dynamics and artificial agent-based modeling in economics, simulation methods in experimental economics, replicator dynamics and simulation analysis for economic systems and digital ecosystems, innovations in evolutionary model of economics, time-series simulation through econometric packages, evolutionary game theory, stability and bifurcation analysis of economic systems.

Sustainable development in digital economics. Impact of big data on sustainable plans to ensure social equality and ecological stability. Data science techniques and numerical, mathematical and computer-based methods, which allow the gaining of insights from economics data. Application of data science techniques in finance and business, data mining using datasets for intelligent/autonomous economic systems, robo-advisors; big data in microeconomics, foundations and trends in machine learning for economic forecasting.

**Intelligent Manufacturing and Information Systems:** collaborative manufacturing and management in the context of Industry 4.0, information management systems for manufacturing enterprises, flexible/digital manufacturing systems, automation and robotics, smart manufacturing and Industry 4.0 strategy, intelligent decision support systems and transportation systems, development of IT systems in which models take a central role for analysis of these systems, information system auditing, GIS based technologies for economic purposes, ERP and CRM systems, digital business platforms. The use of IT in algo-trading, portfolio analysis and asset management.

**ICT Education for Economists:** curriculum design and innovations, quality assurance and quality standards, e-CF and EQF standards, competencies and learning outcomes at national and international levels for ICT education in economic science; promotion of effective transfer of research results to the market, web applications for business goals and labor markets; gamification of study process, FinTech industry in education, cloud technologies for informatics learning in business, economics, finance and accounting, university-enterprise collaboration opportunities: promotion of knowledge transfer from university to industry in economic and business interactions. Quality assurance of IT-Education and its impact on the economy. Impact of IT education on the country's growth.

## Submission Types and Requirements

ITER solicits (i) full (regular) research papers, (ii) short (work in progress) research papers, (iii) discussion, survey, or problem analysis papers, (iv) industry experience reports or case studies. Evaluation criteria are the same as those of the main ICTERI 2021 Conference. Please refer to <http://icteri.org/icteri-2021/submission-types/> (except posters) for more details.

## Submission Instructions and Publication

The language of ITER is English. All submissions shall be annotated by the key words/phrases freely chosen by the authors. At least three and at most five key phrases have to be provided.

All submissions must comply with the [Springer CCIS format guidelines](#). Formatting instructions and template are provided for your convenience at the ICTERI 2021 web site: <http://icteri.org/icteri-2021/formatting-instructions/>

Submissions must be made in .pdf by using the [EasyChair](#) System (track ITER):

<https://easychair.org/conferences/?conf=icteri2021>.

Please submit your paper to the **ITER 2021 Workshop** Track.

1. Only papers written in English can be recommended, if accepted by the ITER PC, for publication in the ICTERI 2021 proceedings which will be published electronically at CEUR-WS (indexed by Scopus).

2. The best Workshop papers may be invited to be extended and published in special issues of Ukrainian journals. ITER traditionally cooperates with the Ukrainian journal: «Neuro-fuzzy modeling techniques in economics», indexed by Scopus (<http://nfmte.com/>).

3. The best Workshop papers may be invited to be extended and published in special issues of Central European Economic Journal (<https://content.sciendo.com/view/journals/ceej/ceej-overview.xml>).

4. The excellent Workshop papers written in English and selected by the ICTERI 2021 Steering Committee, among those presented at the conference, may be invited to be revised and extended for the ICTERI post-proceedings volume. The post-proceedings of ICTERI are traditionally published by Springer Communications in Computer and Information Science (CCIS) series (indexed by Scopus).

## Evaluation and Presentation

Every submission will be evaluated by at least three members of the ITER Program Committee. Based on evaluation results, the best papers will be accepted for their presentation at the workshop and publication in the proceedings.

Workshop organizers will withdraw the paper from the publication in CEUR-WS proceedings if the author(s) do not attend and present their papers on the workshop.

## Program Committee of WS ITER 2021

### Chairs

[Vitaliy Kobets](mailto:vkobets@kse.org.ua) ([vkobets@kse.org.ua](mailto:vkobets@kse.org.ua)), *Kherson State University, Ukraine*

[Tetiana Paientko](mailto:tpaventko109@gmail.com) ([tpaventko109@gmail.com](mailto:tpaventko109@gmail.com)), *Kyiv National Economic University named after Vadym Hetman, Ukraine*

[Tommaso Federici](mailto:tfederici@unitus.it) ([tfederici@unitus.it](mailto:tfederici@unitus.it)), *Università degli Studi della Tuscia, Italy*

### Program Committee Members

Geography of 60 PC members: Georgia, Poland, USA, Italy, New Zealand, Lithuania, Malaysia, Slovakia, Pakistan, Ukraine, Albania, Germany, Czech Republic, Estonia, Bulgaria, India, Slovenija, Macedonia, Japan.

Please check the Program Committee page at the ICTERI 2021 web site for the list of the WS ITER PC members:

<http://icteri.org/icteri-2021/workshops-calls-for-papers/iter-2021/>

### Workshop Organizers

- [Vitaliy Kobets](mailto:vkobets@kse.org.ua) ([vkobets@kse.org.ua](mailto:vkobets@kse.org.ua)), *Kherson State University, Ukraine;*

- [Tetiana Paientko](mailto:tpaventko109@gmail.com) ([tpaventko109@gmail.com](mailto:tpaventko109@gmail.com)), *Kyiv National Economic University named after Vadym Hetman, Ukraine*

### How to Get to Kherson

Kherson is the regional capital city in the South of Ukraine. It is a nice and calm city with many nations living in one comfortable place. It is famous for its traditions of southern-Ukrainian hospitality. The city and neighborhood offer abundant attractions for traditional and ecological tourism. Kherson is well connected to international air hubs through its local airport. (<https://khe.aero/?lang=en>). More details are available at the Conference Venue page at the ICTERI 2021 web site: <http://icteri.org/icteri-2021/conference-venue/>.