Call for Papers

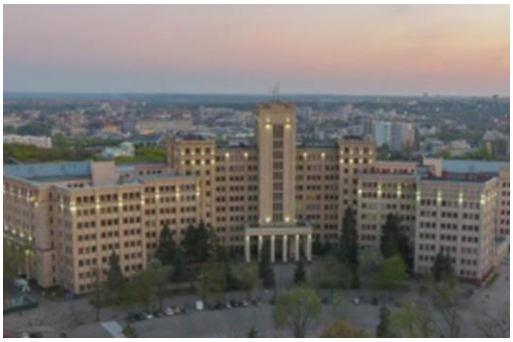
8th International Workshop (ITER 2020)

Information **T**echnology in **E**conomic **R**esearch

Co-located with the 16th International Conference
on ICT in **E**ducation, **R**esearch, and **I**ndustrial Applications:
Integration, Harmonization, and Knowledge Transfer (ICTERI 2020)

June 16, 2020, Kharkiv – Ukraine
http://icteri.org/icteri-2020/workshops-calls-for-papers/iter-2020/

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: V.N. Karazin Kharkiv National 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 both public and private sectors interested in a focused look into information technology in economic research related to the design, development, implementation, use and management of emerging technologies and the move to digital economy.

It is a bridge linking researchers from computer science, business computing and information system areas to real world business applications for digital microeconomics 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 2020 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, 30.03.2020 – paper submission deadline
Monday, 20.04.2020 - acceptance notification
Monday, 11.05.2020 - submission of camera ready papers
Monday, 11.05.2020 - registration deadline
Monday, 16.06.2020 – 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.

The Scope of ITER

The use of computer programs in all sorts of economic simulations has become increasingly popular in the last few years, producing a wide variety of interesting applications, such as neural network forecasting in economics, digital business models for decision makers, different scenarios of decision making in evolutionary and simulation economics, impact of big data on sustainable economic development, intelligent manufacturing and information systems in digital economics, and quality assurance of ICT competences for economists in labor markets.

The workshop focuses on the interplay of two important themes: (1) the application of IT in business, economics, finance and research; (2) the economics of research and development in IT industries.

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 2020 invites papers on, but not strictly limited to, the following topics:

Fuzzy Logic and Neural Network Forecasting in Economics: 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, their program implementation, and experimental studies on their effectiveness, contributions on how humans represent and use incomplete and uncertain data and knowledge in decision making and preparation of economic strategies, neuromarketing ICT techniques, and machine learning techniques in business.

Digital Economics and Digital Business Models: digital advancements which can lead to the development of important applications such as digital currencies, blockchains; business model innovation which is capable of creating disruption in existing industries and driving the diffusion of new technologies, 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, and to new value chains. Use cases: blockchains for trade finance, supply chains, capital markets, general government services, the alliance between finance and digital technology which leads to the emergence of new actors in the field of digital financial intermediation. These new entrants seek to provide solutions by reinventing new distribution patterns, understanding new customer behaviors and developing new business models.

Evolutionary and Simulation Economics: evolutionary dynamics and 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, artificial agent-based analysis, evolutionary game theory and its applications in economics, business, finance and accounting, stability and bifurcation analysis of economic systems, online auctions and technologies, SME digital innovation and transformation.

Data Science and Big Data in Sustainable Development 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 knowledge or insights from economics and business data in various forms, either structured or unstructured. Application of data science techniques in decision making problems with uncertain and incomplete information to support decision making in economics, finance and business, data analysis, data mining using datasets for intelligent/autonomous economic systems, robo-advisors; big data in microeconomics, foundations and trends in machine learning for economic forecasting, statistical analysis of economic behavior and datasets, clustering and classification of consumer types and segments of market in pricing and promotion of goods and services using IT tools.

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. ICT education and its role in economic prosperity of a society. Impact of IT education on the country's growth. The connection between IT education and economic growth as well as new approaches of IT education in business and economics are in the focus.

Submission Types and Requirements

ITER solicits (i) regular (full) research papers, (ii) short 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 2020 Conference. Please refer to http://icteri.org/icteri-2020/submission-types/ 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 2020 web site: http://icteri.org/icteri-2020/.

Submissions must be made in **.pdf** by using the **EasyChair** System (track ITER):
https://easychair.org/conferences/?conf=icteri2020.

Please submit your paper to the **ITER 2020 Workshop** Track.

1. Only papers written in English can be recommended, if accepted by the ITER PC, for publication in the ICTERI 2020 proceedings which will be published electronically at CEUR-WS (indexed by Scopus)

2. The best Workshop papers in Ukrainian and Russian may be invited to be extended and published in special issues of Ukrainian journals. ITER traditionally cooperates with the Ukrainian journal: «Information Technologies in Economic Research» (http://iter.kspu.edu/en)

The best Workshop papers in English which were not recommended for presentation may be invited to be extended and published in special issue of Central European Economic Journal (https://content.sciendo.com/view/journals/ceej/ceej-overview.xml).

3. The best Workshop papers written in English and selected by the ICTERI 2020 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.

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, if written in English, publication in the proceedings.

It is strongly required that at least one author of an accepted paper:

- Attends the workshop in person
- Presents their paper in person at the workshop at the time specified in the program.

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

Program Committee of WS ITER 2020

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How to Get to Kharkiv

Kharkiv, a regional capital city in the east of Ukraine, is a large industrial, scientific, and educational center. This is a modern, cozy and comfortable metropolis with convenient logistics. The Kharkiv region is stable and calm, with the national police ensuring safety and security in the city. The airport of the city is the Kharkiv International Airport, which provides international flights to Vienna, Warsaw, Minsk, Istanbul, Tel Aviv, Thessaloniki, Amman, Beirut and others, as well as domestic Ukrainian flights (https://hrk.aero/en/). More details are available at the **Conference Venue** page at the ICTERI 2020 web site: http://icteri.org/icteri-2020/conference-venue/