16th International Conference ICTERI 2020
ICT in Education, Research, and Industrial Applications: Integration, Harmonization, and Knowledge Transfer
June 16-20, 2020, Kharkiv - Ukraine

Linkedin Group: ICT in Education, Research, and Industrial Applications
Facebook Group: ICTERI Conference
Proceedings: CEUR-WS indexed by DBLP, Scopus, Web of Science
Post-proceedings: Springer CCIS (pending acceptance), indexed by: Scopus, Web of Science, EI-Compendex, Mathematical Reviews, SCImago

Conference Scope
ICTERI is an annual peer-reviewed international Computer Science conference. It focuses on research, design, development, deployment and usage of advanced information systems and ICT Infrastructures in industry and education. Particular attention is paid to ensuring that the ideas and solutions presented can or have been put into practice. This can be demonstrated, for example, by a proof-of-concept implementation, a comprehensive prototype, a comprehensive case study or the analysis of real use cases. Reports on academic-industrial partnerships for ICT innovation and knowledge transfer are as welcome as technological and methodological submissions.

We solicit submission of original work, not previously published, or submitted for publication elsewhere. Papers must be submitted to one of the following Thematic Tracks:

- **Track 1: Advances in ICT Research**
  - Resources Integration and Interoperability
  - Managing Big Data and Linked Open Data at Scale
  - Data Analytics and Business Intelligence
  - Knowledge Models, Languages, and Representations
  - Ontologies: Extraction, Engineering and Evolution
  - Domain Modeling Languages and Tools
  - Machine Learning: Deep Learning and Reasoning
  - Recommender Systems: Methods and Technologies
  - Challenges Arising within the Concept of Digital Society

- **Track 2: Information Systems: Technology and Applications**
  - Service-Oriented and Large-scale Distributed Computing and Cloud-based Technologies
  - Model Driven Architectures / Software Development
  - Smart - systems: Models, Technologies and Applications
  - Knowledge Extraction, Engineering and Management

- **Track 3: Academia/Industry ICT Cooperation**
  - Joint Academic-Industrial Research and Development
  - Infrastructures, Tools and Framework Conditions for Cooperation and Knowledge Transfer
  - Experiences in ICT for Technology-Enhanced Learning and Corporate Team Training
  - Best Practices in Cooperative Projects

- **Track 4: ICT in Education**
  - Methodology and Didactics of Teaching and Using ICT
  - ICT in Technology Enhanced Learning and Instruction
  - Advances in and Tools for Technology Enhanced Learning
  - ICT Competence Design and Development
  - Quality Assurance of ICT Education
  - Professional Retraining and Life-Long Learning using ICT

*ICTERI Tracks focus, but are not limited to the listed topics

**Important Dates**
(23:59 Hawaii time)
Monday, 27.01.2020 – paper abstract submission deadline
Monday, 24.02.2020 – all paper types submission deadline
Monday, 20.04.2020 – acceptance notification
Monday, 11.05.2020 – camera ready papers submission deadline
Monday, 11.05.2020 – registration deadline
Monday, 25.05.2020 – presentation drafts submission deadline
Tuesday, 16.06.2020 – Saturday, 20.06.2020 – Conference days

**No Conference Fee**
Traditionally, ICTERI does not charge conference fees. Participation is FREE. Infrastructure and service expenses are covered by our sponsors.

**Workshops and PhD Symposium**

**Submission Guidelines**
The language of the ICTERI Main Conference is English. Submissions in any other language or not following the style guidelines will be rejected without review. Presentations in any other language are also not accepted and withdrawn from the program. All submissions shall be annotated by 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 LNCS format guidelines](https://www.springer.com/gp/computer-science/lncs). Formatting instructions and template as well as submission guidelines are provided for your convenience at the ICTERI 2019 web site: [http://icteri.org/icteri-2019/](http://icteri.org/icteri-2019/).

Please submit your paper in .pdf to the applicable ICTERI 2020 Track via the EasyChair Conference Management System: [https://easychair.org/conferences/?conf=icteri2020](https://easychair.org/conferences/?conf=icteri2020).

**Submission Types**
Several types of papers are solicited for the main ICTERI conference tracks. Submission types are:

- **I Full research papers**
  - Report on accomplished, unpublished research work
  - Present a novel method, technique or analysis with appropriate empirical or other evaluation as a proof of validity

Evaluation focuses on originality, technical soundness and the soundness of the real use demonstration. Page limit: 16 LNCS pages.
II Short research papers
- Short reports of preliminary results or work in progress
  Page limit: 12 LNCS pages.

III Discussion, survey, or problem analysis papers
- Help understand a relevant problem without introducing a novel method, technique, or approach.
  Examples: a review placing a problem onto the state-of-the-art landscape and analyzing how far current solutions fall short; an in-depth discussion and analysis of a certain problem, etc.

Evaluation focuses on the soundness of the problem analysis and the interest for the scientific community. Page limit: 16 LNCS pages.

IV Industry or education experience reports
- Report on industrial or academic deployments of ICT
- Experiences in the effective and efficient use of ICT in education

Evaluation focuses on significance and practical relevance, technical soundness, and accompanying evaluation or industrial validation. Page limit: 12 LNCS pages.

The papers submitted as one of the above types (I-IV) and
- Evaluated as not sufficiently mature by the Program Committee; and
- Recognized by the reviewers as interesting and promising in their idea or approach
may be recommended to be considered as a Poster.

V Posters
- Concise presentations of early-stage research in the form of an Extended Abstract. These papers outline preliminary ideas, concepts, and initial results shaping out the future work.

Posters will be presented in a separate poster session.

Evaluation focuses on originality, technical correctness, the value of the research ideas, and the potential to become a mature research outcome in a short-to-mid-term perspective. Page limit: 6 LNCS pages.

More details on the requirements to different paper types and the ways these papers are presented at the conference are provided in the Paper Types page at the ICTERI 2020 web site: http://icteri.org/icteri-2020/submission-types/.

Evaluation and Publication

All submissions will be evaluated by the members of the international program committee. Accepted papers will be published in the international proceedings volume on-line (CEUR-WS).

The best papers among the accepted and presented at the conference will be selected and invited by the ICTERI Steering Committee to be revised and extended for the ICTERI post-proceedings volume by Springer Communications in the Computer and Information Science (CCIS) series (pending approval).

Please check the Previous ICTERI Conferences page at the ICTERI 2019 web site (http://icteri.org/icteri-2019/previous-icteri-conferences/) to access the proceedings and post-proceedings volumes published by the previous conferences.

Papers may be invited for publication, in substantially extended and refined versions, in the special issues of Ukrainian and international journals. ICTERI traditionally cooperates with the two Ukrainian journals: «Bulletin of V.N. Karazin Kharkiv National University» (http://mia.univer.kharkov.ua/) and «Information Technology in Education» (http://ite.ksu.ks.ua/en/).

Presentation

Accepted papers must be presented at the conference by one of their authors, who commit to register and attend the conference. The Presentation Chair reserves the right to withdraw those papers from the proceedings which have not been presented at the conference.

Organizers

Ministry of Education and Science of Ukraine
V.N. Karazin Kharkiv National University, Ukraine
Kherson State University, Ukraine
Zaporizhzhia National University, Ukraine
Taras Shevchenko National University of Kyiv, Ukraine
Universität Klagenfurt, Austria
Université Côte d’Azur, France
Lviv Polytechnic National University, Ukraine
Institute of Information Technology and Learning Tools, National Academy of Educational Science, Ukraine
Ukrainian Scientific and Educational IT-Society (UNIT), Ukraine
DataArt Solutions Inc., USA

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Program Committee
Please check the Program Committee page at the ICTERI 2020 web site for the list of the PC members: http://icteri.org/icteri-2020/program-committee/.

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How to Get to Kharkiv

Kharkiv is the regional capital city in the East of Ukraine and is a large industrial, scientific, and educational center. This is a modern, cozy and comfortable metropolis with convenient logistics. Kharkiv region remains stable and calm, with the national police ensuring safety and security in the city. The air gate of the city is the international airport «Kharkiv», which provides international flights to Vienna, Warsaw, Minsk, Istanbul, Tel Aviv, Thessaloniki, Amman, Beirut and so on, 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/.