The 8th International Conference on ICT in Education, Research, and Industrial Applications (ICTERI 2012) brings together academics and practitioners interested in the technological advances and business applications of Information and Communication Technologies and Infrastructures.

ICTERI focuses on real world applications; therefore authors should highlight the benefits of their results or experience for industry and services, in addition to academic world. Papers describing advanced prototypes, systems, tools and techniques and general survey papers indicating future directions are also encouraged. Both technological and methodological submissions are welcome.

All papers must describe original work, not previously published or submitted elsewhere.

ICTERI plans hosting a small number of short tutorials on the topics related to the general theme of the conference. The role of an ICTERI tutorial is to be a theme-oriented comprehensive survey. The call for ICTERI 2012 Tutorials is published separately.

Companies or individuals interested in presenting their products/methodologies or in sponsoring the conference are invited to contact the conference steering committee. This year ICTERI will comprise a collection of such talks and presentations as its IT Talks sub-event.

ICTERI also offers its infrastructure and facilities for the organizers of satellite workshops that match the scope of the conference. The call for ICTERI 2012 Workshops is published separately.

**Conference Scope**

Traditionally ICTERI solicits full research, work-in-progress, discussion papers and industry experience reports. In particular, but not exclusively, the papers within the following topics are relevant:

- ICT infrastructures, integration and interoperability
  - Linked Data and Data Clouds
  - Data Grids and Grid Infrastructures
  - Web Services and distributed computing
- Semantic Web Services
- Service choreographies, compositions, and orchestrations
- High performance computing
- Ubiquitous computing
- Distributed data warehousing and business intelligence
- Concurrent computation
- Agent systems for integration and interoperability

- Machine Intelligence, knowledge engineering (KE), and knowledge management (KM) for ICT
  - Methodologies for KE and KM
  - Knowledge models and representations in ICT applications and related domains
  - Knowledge based collaboration, knowledge distribution, and evolution of knowledge
  - Advanced knowledge modeling languages and tools
  - Foundations of KE and KM
  - Layered intelligence in KE and KM
  - Provenance, reliability and trust in KM
  - KM and KE for collaboration and decision support
  - Distributed approximate, large-scale reasoning in ICT
  - Knowledge evolution
  - Distributed AI, intelligent software agents, multi-agent systems for KE and KM
  - Biologically and socially inspired approaches to implement machine intelligence

- Model-based software system development
  - Mathematical models of information systems and processes
  - Formal methods for specification and verification of software systems
  - Mathematical modeling and computer simulation of systems

- Cooperation between academia and industry in ICT
  - Management of joint academic-industrial research and development
  - Deployments of ICT for academic-industrial cooperation and knowledge transfer
  - Industrial experiences in using ICT and knowledge technologies

- Methodological and didactical aspects of teaching ICT and using ICT in education
  - Spectrum of professional qualifications: labor market needs, the impact of the labor market on the formation of the graduates’ competences
  - Standardization of IT specialists’ training and specializations: balance between theoretical and practical training; elective courses – what is it?
  - Quality assurance of IT specialist training
  - Participation of universities in professional retraining and life-long training on demand of the labor market
  - ICT tools and environments for professional training at universities
  - Computer mathematics and modeling systems in education
  - Competence paradigm of education and research approach in education with ICT support
  - Microcomputer laboratories in education (Sciences, Mathematics, Languages, Engineering etc.)
  - ICT support for virtual educational communities (social constructivism and constructionism approach)
  - CAT (Computer adopting testing) and MS (monitoring systems) in education
Submission Guidelines

The language of the main ICTERI Conference is English. The organizers of the satellite events (workshops, IT talks, tutorials) will announce their working languages individually.

Four types of submissions are solicited for the main conference:

a) Full research papers
The papers in this category are the reports on the accomplished research work. They present a novel method, technique or analysis with appropriate empirical or other type of evaluation as a proof of validity. The main evaluation criteria for this category are originality, technical soundness and the soundness of evaluation.

**Page limit:** 16 pages

b) Short research papers
The papers in this category are the short reports of the preliminary results or describing the work in progress. The main evaluation criteria for this category are originality, technical correctness and possible value of the planned results in a short to mid-term perspective.

Short papers can be presented in a form of an extended abstract.

**Page limit:** 8 pages/4 pages for an extended abstract

c) Discussion, survey, or problem analysis papers
The papers solicited in this category will not present any novel method, technique or approach to solving a problem, but help understand the problem itself. Within the genre we expect receiving reasonable reviews placing a problem onto the state-of-the-art landscape and analyzing how far current solutions fall short. We also expect in-depth discussions and analysis of a certain problem, with clear definitions and argumentation in terms of qualitative or quantitative representation of the main characteristics of the problem. Papers will be evaluated with respect to how general and technically sound their problem analysis is and how useful it will be for other researchers working on the same problem.

**Page limit:** 18 pages

c) Industry experience reports or case studies
The papers reporting on industrial deployments of ICT are solicited in this category. The papers will be evaluated according to the significance and practical relevance of the described deployments as well as with respect to the technical soundness of the described solution and accompanying evaluation or industrial validation.

**Page limit:** 12 pages

The papers in all the categories should describe original results that have not been accepted or submitted for publication elsewhere.

All submissions shall be annotated by providing two alternative sets of key phrases:


- The key words/phrases freely chosen by the authors

At least three and at most five key phrases have to be provided in each set.

The program committee reserves the right to reject the submissions that do not contain such subject descriptor lists without review.

All draft submissions must comply with the Springer LNCS format guidelines: [http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0](http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0). A submission template for MS Word 2003 is also provided at the ICTERI web site for your convenience: [http://www.icteri.org/sites/default/files/Formatting-Guidelines-ICTERI-2012-Manuscript_0.doc](http://www.icteri.org/sites/default/files/Formatting-Guidelines-ICTERI-2012-Manuscript_0.doc)

Submissions should be made electronically in PDF or DOC/DOCX (MS/Open Word) format via the electronic submission system of the ICTERI Conference Management system at [https://www.easychair.org/conferences/?conf=icteri2012](https://www.easychair.org/conferences/?conf=icteri2012).
The authors of the accepted papers will be requested to revise their submissions in a way that takes into account the comments and suggestions by reviewers.

**Publication**

All submissions will be evaluated by at least three members of the international program committee. Several degrees of acceptance will be applied:

- **The papers with the highest evaluation scores** that will be published in the international proceedings volume
  ICTERI 2011 published its international proceedings volume as CEUR-WS Vol. 716 (ISSN 1613-0073, [http://ceur-ws.org/Vol-716/](http://ceur-ws.org/Vol-716/)). It is planned that this year the selection of the top rated papers will also appear as a CEUR-WS volume before the conference. Besides that and depending on the quantity, quality, and acceptance rate of the international proceedings papers, the extended revisions of the best of them will be invited for publication in an international journal or a post-proceedings book by an international publisher.

- **The papers with moderate evaluation scores** that will be published in a Special Issue of a Ukrainian Scientific Journal or Magazine
  Last year the papers accepted in this group were published by the special issues of the two Ukrainian journals:
  These journals have agreed to continue their cooperation with ICTERI for 2012.

- **The extended abstracts of the papers with acceptable evaluation scores** that will be published in the Conference Abstract Volume with ISBN by the local Ukrainian publisher.
  In addition to the traditional publication channels ICTERI 2012 offers the on-line publication of the abstracts and presentations of accepted papers on the ICTERI Wiki ([http://isrg.kit.znu.edu.ua/icteriwiki/](http://isrg.kit.znu.edu.ua/icteriwiki/))

**Important Dates**

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<tr>
<td>15.01.2011</td>
<td>submission of workshop proposals</td>
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<td>20.02.2012</td>
<td>paper submission (all submission types)</td>
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<td>14.02.2012</td>
<td>notification about acceptance or rejection of workshops</td>
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<td>01.03.2012</td>
<td>submission of tutorial proposals</td>
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<td>15.04.2012</td>
<td>submission of the camera ready versions of the accepted papers</td>
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<td>01.06.2012</td>
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