



## The 5<sup>th</sup> International Conference on Application of Information and Communication Technologies AICT2011

Azerbaijan, Baku, 12-14 October 2011  
<http://www.aict.info/2011>

**Paper submission has started.**

### AICT2011 Proceedings and Indexing:

Accepted papers include Engineering Index (EI) and EI Compendex and IEEE Xplore TM IEEE Catalog Number CFP1156H-ART, ISBN 978-1-61284-832-7

Selected papers will be published as a special issue of the Academic Publisher, JOURNAL OF NETWORKS (JNW) [ [www.academypublisher.com/jnw/](http://www.academypublisher.com/jnw/) ]

(The journal of Networks is a professional, peer-reviewed, publishing high-quality scientific articles in network fields. The journal is indexed in major databases including EBSCO, INSPEC, and EI Compendex.)



Academic Publisher,  
Journal of Networks (JNW)



IEEE Xplore Digital Library



International Journal of  
Qafqaz University



AICT2009 Conference  
Electronic Proceeding  
(CD)

Please contact: Dr. Abzetdin Adamov ✉, Qafqaz University

### Our Sponsors:

Partner Sponsor



Gold Sponsor



**About AICT2011 Conference:** On behalf of the Steering Committee, we welcome you to the The 5<sup>th</sup> International Conference on Application of Information and Communication Technologies (AICT2011) will be held in Baku, Azerbaijan on the 12, 13 and 14th of October 2011. The AICT2011 Conference will build on the success of the previous conferences, which were held in Baku and Tashkent under Institute of Electrical and Electrical Engineering (IEEE) technical support (Please, visit links on "Conference Archive" section in order to see the previous AICT ivents).

AICT2011 is co-organized by Ministry of Communication and Information Technologies of Azerbaijan, Ministry of Education of Azerbaijan, Qafqaz University, Baku State University and Institute of Information Technology of ANAS in co-operation with IEEE ComSoc Turkey Chapter and Uzbekistan IEEE Regional Chapter technically co-sponsored by Institute of Electrical and Electrical Engineering (IEEE). AICT2011 will offer oral, poster sessions, ketnote speeches, tutorials and, professional meetings. Submitted papers are expected to cover state-of-the-art technologies, theoretical concepts, standards, products implementation, ongoing research projects as well as application issues of the ICT. In the previous AICT was joined by hundreds of participants from several countries including Azebaijan, Uzbekistan, Sweden, Canada, China, Finland, Turkey, Russia, Romania, Iran, ...

**AICT2011 Conference Scope:** AICT2011 topics include, but are not limited to, the following research and development areas/fields (more than 80 topics for more information visit [Sessions / Topics](#)):

- Information Science and Application
- Communication, network and hardware
- ICT in Business Administration, Finance and Economy
- ICT in Governance and Government Policy Making
- ICT in Medicine and Health Care
- ICT in Education, Research and Science
- ICT in Humanities and Social Sciences

**AICT2011 Conference Purpose:** The AICT2011 International Conference is a forum to bring together business people, researchers, scientists, software architects, and industry professionals to discuss innovative ideas and diverse topics on next generation of information technologies and services. Using this forum, researchers and practitioners can exchange issues, challenges, new business models and structures, and new technologies and solutions. The AICT2011 aims at attracting both researchers from academic and industrial institutions and practitioners from industry. Researchers, practitioners and distinguished speakers are invited to submit a paper and/or to make proposals of original research speeches addressing business and technical issues, challenges, solutions, and technologies in building applications, complete solutions and ICT-based services. All papers/proposals will be peer-reviewed by the members of the international program committee.

The AICT2011 conference's social programs have always brought Azerbaijani hospitality to the fore of our

meetings and discussions. This year the social program includes the opening reception, the closing "Gala Dinner", and three lunches.



## IMPORTANT DATES:

---

Conference date: 12 - 14 October, 2011

Paper Submissions Beginning:	November 1, 2010
Paper Submissions Deadline:	July 1, 2011
Notification of Acceptance:	August 1, 2011
Camera Ready Version Due:	August 10, 2011

## Organized By:

---

	<a href="#">Institute of Electrical and Electronics Engineers</a>
	<a href="#">Ministry of Communication and Information Technologies</a>
	<a href="#">Ministry of Education of Azerbaijan</a>
	<a href="#">Qafqaz University</a>



[Baku State University](#)



[Institute of Information Technology of ANAS](#)

## **PAPER SUBMISSION GUIDELINES:**

---

Authors are requested to submit electronically a PDF file paper(s) only to the following link: [Click to submit your paper](#) (PAPER SUBMISSION).

Accepted papers include Engineering Index (EI) and EI Compendex.

Elsevier publishing house will be receiving all the titles of the accepted papers from IEEE AICT2011 conference for inclusion in its databases, including Engineering Index (EI) and EI Compendex.

Identification numbers, the IEEE catalog number and ISBN will be assigned to AICT2011 accepted papers.

Papers title, author names and addresses and Emails, paper abstract and keywords should be written in English and should preferably follow the instructions in [Template](#) others parts of the paper can be written in your native language as Azerbaijani, Turkish or Russian languages.

Preferred maximum paper length is 5 printed pages (10-point font) including figures. IEEE will accept papers for review up to 7 pages in length. Accepted papers that are longer than 5 pages will be charged an over length fee of \$100 USD for 6 pages and \$200 USD for 7 pages. Under no circumstances may any submission should exceed 7 pages. Papers in excess of 7 pages shall not be considered for review or publication. The cover page is not included in the page count. The title of the paper, author's name, affiliation, complete return address, telephone number, facsimile number and e-mail address should appear at the top of the first page followed by an abstract with a maximum of 100 words. Authors must state that their paper has neither been published before nor currently being submitted elsewhere. Accepted papers will be published in the conference's proceedings and/or CD-ROMs and the publication will be available on **IEEE Xplore™**. Selected papers will also be published in a journal.

For additional information concerning paper submission, Please contact general chair: Prof. Guy Omidyar [guy.omidyar@ieee.org](mailto:guy.omidyar@ieee.org) or Dr. Abzeturdin Adamov [aadamov@ieee.org](mailto:aadamov@ieee.org) or just fill the [Contact Us](#) form.

**Note:** The final submission of accepted papers (Camera ready) must be in accordance to publisher's formatting standard IEEE Xplore at: [IEEE Xplore](#)

## **SESSIONS and TOPICS:**

---

AICT2011 topics include, but are not limited to, the following research and development areas/fields:

### **Application**

- Semantic Web Services
- Service Oriented Architecture
- Semantic Web: Concepts, Technologies and Applications
- Web2 new development paradigm
- Web Ontology and Development
- The Design Evaluation and Implementation of the Interface
- Context-aware computing and location-based services
- Semantic Web and Ontology
- Case Studies on Data Management, Monitoring and Analysis
- Location and mobility semantics
- Concepts and Development of Information Systems
- IS Architectures and Platforms
- IS Tools and Standards
- Information System Management
- Decision Support Systems
- Data Mining
- Distributed and Parallel Computing
- Cyber Security
- Fuzzy logic and Reasoning
- GIS and Remote Sensing
- Unified data processing and communication systems

### **Communication, network and hardware**

- Wireless, ad-hoc, meshed, etc. networks
- Mobile-based computing
- Policies for communication access development
- Sensor networks / alert systems
- Networking and computing in challenged environment
- Cost-effective Rural, Urban and Community Wireless and Mesh Networks
- Wireless Multimedia Services
- Wireless Local Loop (WLL)
- Multiple Access Technology
- Broadband Wireless Access
- Security in Mobile and Wireless Networks
- WLAN and Mobile WIMAX, 3G and 4G systems
- Optical Passive and Active components and devices
- Network management and services
- Simulation, Modeling and analysis and performance evaluations
- Physical and link layers and lower layers of protocols
- Higher layers of protocols, application

### **ICT in Humanities and Social Sciences**

- Public Access to Information and Globalization
- Human-Computer Challenge and Interaction
- Planning and Deployment of Community and Municipality Wireless Networks

- Policy and Legislation for digital environment
- Communication media and Internet
- Web and Society
- Using ICT in development
- e-Learning and democratization using the Internet
- Social Networks meet Wireless
- Social impact of ICT in developing countries
- Optical Communications and networking

### **ICT in Governance and Government Policy Making**

- e-Government and e-Government strategy
- e-Planning
- Public Participation and Information Technologies in citizen governance
- Government service automation strategies
- Metadata and public standards
- Management Resource and Information Management

### **ICT in Medicine and Health Care**

- e-Health and Telemedicine
- Medical and Nursing Informatics
- Design and development methodologies for Healthcare IT
- Support for clinical decision-making
- Mobile technologies for Healthcare applications
- Healthcare Management Systems
- Human-Machine Interfaces for Disabled Persons

### **ICT in Education, Research and Science**

- e-Learning
- e-Learning Platforms and Tools
- Interactive Learning Systems
- Standards, Policies and Best Practices in e-Learning
- Pedagogical and Organizational Frameworks
- Mobile Learning Applications
- Building Learning Communities
- e-Commerce Education
- Management of Learning Resources
- Learning & Content Management Systems
- Virtual Classrooms, and Universities
- Knowledge Management in e-Learning
- Organizational e-Learning Strategies
- Industry-University Partnership
- Interfaces for illiterate users
- Culturally adapted content
- Methods and Strategies for Assessment of S&T Education
- Different Approaches to Implementation of ICT in S&T Education
- Visualization in S&T Education
- Increasing Public Awareness and Understanding of Science
- Outdoor Science Exploration
- Sustainable Agriculture / Natural Resource Exploitation
- Computer assisted agriculture

- Industrial, Automation & Manufacturing Engineering

### **ICT in Business Administration, Finance and Economy**

- ICT for micro/small businesses
- Business support in shared environment
- Business process management, re-engineering and modelling
- Interfacing with developed business methodologies
- Case Studies and Testbeds
- Business Models and Economics of Community and Rural Wireless Networks
- Internet as base of distributed business models
- Location and Context Management
- IT Pressure to Organisation Culture and Change Management
- Enterprise Resource Planning
- Customer Relationship Management
- Supply chain Management
- Business Intelligence
- Knowledge Management
- E- and M- Commerce
- IS Adoption and Strategies
- e-Business Strategies

### **CONFERENCE COMMITTEES:**

---

#### **Conference Chairs:**

Ali Abbasov, The Ministry of Communications and Information Technologies of Azerbaijan  
Misir Mardanov, Ministry of Education of Azerbaijan

#### **Conference Chairmen:**

Professor Ahmet Sanıç, Qafqaz University Rector, Azerbaijan

#### **General Chairs:**

Professor Guy Omidyar, Omidyar-Institute USA ✉

Dr. Abzетdin Adamov, Qafqaz University, Azerbaijan ✉

#### **Technical Program Co-Chairs:**

- Professor Fikret Aliyev, Baku State University, Azerbaijan ✉
- Associate Professor Vincent Guyot, ESIEA/LIP6, France ✉
- Professor Asoke Talukder, IIIT, Bangalore, India ✉
- Professor Cevdet Meriç, Fatih University, Turkey ✉
- Professor Serdar Korukoğlu, Ege University, Turkey ✉
- Assistant Professor Kshetrimayum Rakhesh Singh, IIT-Guwahati, Guwahati, Assam, India ✉
- Dr. Nazim Agoulmine, University of Evry Val d'Essonne, France ✉
- Dr. Nargiza Usmanova, IEEE Comsoc Chapter chair, TUIT, Uzbekistan ✉
- Professor Rifat R. Ibraimov, TUIT, Uzbekistan ✉
- Professor Aripov Khajrula Kobilovich, TUIT, Uzbekistan ✉
- Professor Alok Kumar Das, Guru Nanak Institute of Technology, India ✉

#### **Panel Chair:**

Dr. Abzетdin Adamov, Qafqaz University, Azerbaijan ✉

#### **Tutorials and Publication Chairs:**

Prof Guy Omidyar, Omidyar Institute, USA

### Local Organizing Committee:

- Professor Hamzaga Orucov, Dean of Engineering Faculty ✉
- Professor Faxreddin Isayev, Rector's Counselor ✉
- Docent Halil Ismailov, Head of Computer Engineering Department ✉
- Dr. Abzedin Adamov, CIO, Head of Computer Engineering Department ✉
- Dr. Yadullah Babayev, Head of Industrial Engineering Department ✉
- Dr. Babek Abbasov, Computer Engineering Department ✉
- Sevil Imanova, Industrial Engineering Department ✉
- Etibar Seyidzade, Computer Engineering Department ✉
- Hayyam Masiyev, Computer Engineering Department ✉

### Advisory and Steering Committee:

- Victor Kureichik, Taganrog State University, Russia ✉
- Raouf Boutaba, University of Waterloo, Canada ✉
- Guy Omidyar, IFIPTC6 WG6.8 Past Chair, USA ✉
- Niftali Gocayev, Qafqaz University, Azerbaijan ✉
- Şahin Durmaz, Qafqaz University, Azerbaijan ✉
- Mehmet Ulema, Manhattan College, USA ✉

### Technical Program Committee members:

- Cem Ersoy, Bogazici University, IEEE ComSoc Chapter Chair, Turkey
- Abolfazl Mehbodniya, INRS, Canada
- Asoke K Talukder, IIIT Bangalore, India
- Canchi Radhakrishna, KYOCERA, USA
- Djamel Sadok, Universidade Federal de Pernambuco, Brazil
- Gholam Ali Rezai rad, University of Science and Technology, Iran
- Guy Omidyar, Consultant, USA
- Guy Pujolle, Université Paris 6, France
- Petr Sosnin, Ulyanovsk State Technical University, Russia
- Khaldoun Al Agha, LRI, University of Paris XI, France
- Khaled Ben Letaief, Hong Kong University, HK
- Halil Ismailov, Qafqaz University, Azerbaijan
- Marie-Jose Montpetit, Motorola, USA
- Mehmet Ulema, Manhatttan College, USA
- Masoud Mashhour, Carleton University, Canada
- Tugrul YANIK, Fatih University, Turkey
- Fatih CAMCI, Fatih University, Turkey
- Nazar Elfadil, SQU, Oman
- Ruslan Kamaev, KSUCTA, Kyrgyzstan
- Abdul Halim Zaimi, Istanbul University, Turkey
- Kamil Saraç, University of Texas at Dallas, USA
- Hasan Bulut, Ege University, Turkey
- Muhammet Cinsdikici, Ege University, Turkey

### INFORMATION for AUTHORS:

---



All accepted papers of AICT2011 will be published in the conference proceedings, under an ISBN reference, in paper or in CD-ROM support.

Paper will be accepted only by electronic submission through the conference web site. At least one of the authors of each accepted paper must register as a full participant of the workshop to have the paper published in the proceedings.

Authors also should adhere strictly to the format instructions. The organizing committee reserves the right to return accepted papers to the author(s) that do not fully comply strictly with the format instructions given on template are available at the conference web site, for more information on the electronic submission see web-site at: [paper submission guidelines](#). Original papers not being submitted to journals or other conferences will be considered. All submitted papers will be evaluated according to its originality, significance, correctness, presentation and relevance. We encourage authors to present novel ideas, critique of existing work, and practical studies and experiments.

## **GUIDELINES for ORAL PRESENTERS:**

---

Presenters must be at the designated room of your session 15 minutes before it begins, so that you can meet your session chair and the other speakers in advance.

It is most important to be within strict time constraints to allow the presentation to fit within the allotted time period. However, if needed, the session chairman will ensure that these time limits are strictly observed. Each paper has an estimated time slot of 15 to 20 minutes for presentation, and an additional 5 minutes for questions and answers.

Overhead and LCD projectors, as well as laptops, will be available in all oral presentation conference rooms. Other equipment will be provided at the presenter expenses if a request is being made. Please kindly forward any such request to the organizing chair of the conference, Dr. Abzetdin Adamov [adamov@ieee.org](mailto:adamov@ieee.org) or Prof. Dr. Guy Omidyar [guy.omidyar@ieee.org](mailto:guy.omidyar@ieee.org)

Presenters should bring their compatible presentation files stored on a CD-ROM/DVD. Presenters are kindly requested to upload their files into the laptop at least 15 minutes before the start of the session, if you do not bring your own desktop. Presenters are also kindly requested to test the functionality of the presentation before the beginning of the session. It is strongly recommended that presenters bring along transparencies as a backup.

## **VISA INFORMATION:**

---

All foreign nationals except citizens of Belarus, Georgia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Moldova, Russia, Ukraine, Bulgaria, Hungary, Romania and Vietnam are required to have business or tourist visas to enter the Republic of Azerbaijan.

Before application for the tourist visa, foreign nationals need to obtain a visa support, in form of a Letter of Invitation (LOI), from a licensed travel agency in Azerbaijan. Citizens of Austria, Belgium, France, Germany, Japan, Spain, Switzerland, UK, and USA do not need LOI, but they could be requested to obtain LOI, if they are obtaining Azerbaijan Visa outside of their country of citizenship. All travelers are suggested to contact in advance Azerbaijan Embassy or Consulate in your location, where they are planning to obtain their tourist visa.

Ministry of Foreign Affairs of Republic of Azerbaijan is at: [Web-site](#)

## CONTACT US:

---

For more information on on the 5<sup>th</sup> International Conference on Application of Information and Communication Technologies please contact the Local Technical Committee or just fill the form below.

### **AICT2011 Local Technical Committee Secretariat:**

Tel:	<a href="tel:+994124482862">+99412 4482862</a> , <a href="tel:+994124482863">+99412 4482863</a>
Fax:	<a href="tel:+994124482861">+99412 4482861</a>
Address:	Baku-Sumgayit road 16 <sup>th</sup> km., Baku AZ0101, Azerbaijan
eMail:	<a href="mailto:aict@qu.edu.az">aict@qu.edu.az</a>
Web site:	<a href="http://www.aict.info/2011">http://www.aict.info/2011</a>