

FORWARD ANNOUNCEMENT AND CALL FOR PAPERS
THE FOURTEENTH INTERNATIONAL MULTI-CONFERENCE ON ADVANCED
COMPUTER SYSTEMS
ACS 2007

SUBCONFERENCE
ARTIFICIAL INTELLIGENCE, SOFTWARE TECHNOLOGIES
BIOMETRICS AND INFORMATION TECHNOLOGY SECURITY
AISBIS 2007

Międzyzdroje, Poland, October 17-19, 2007

Organized by

Szczecin University of Technology, Faculty of Computer Science

Purpose of Conference

Artificial intelligence, software technologies, biometrics and IT security are established fields of computer science of both theoretical and practical significance.

The aim of ACS'2007 Multi-Conference is to bring artificial intelligence, software technologies, biometrics, IT security and open and distance learning researchers in contact with the ACS community, and to give ACS attendees an opportunity to talk to experts working in these areas. Industrial and systems presentations bearing new ideas and solution paradigms are welcome as well.

The topics of interest of the Conference Sections include, but are not limited to:

Artificial intelligence

1. Neural network theory and applications in technique, economic and medicine systems
2. Hardware implementations
3. Fuzzy logic theory and applications
4. Fuzzy optimisation
5. Fuzzy control
6. Evolutionary algorithms, theory and applications
7. Rough sets, theory and applications
8. Intelligent agent systems
9. Data mining – knowledge extraction
10. Databases knowledge for e-distance learning systems
11. All applications of artificial intelligence in prediction, identification, pattern recognition, image and signal processing, speech and computer vision, financial engineering and forecasting, medicine, industry

Software technologies

1. Methods and techniques for software development and maintenance: requirements engineering, object-oriented technologies, formal methods, re-engineering and reverse engineering, reuse, software management issues
2. Software architectures: patterns for software design and composition, frameworks, architecture-centered development, component and class libraries, component-based design
3. Enabling technology: CASE tools, software development environments and project browsers, compilers, debuggers and runtime libraries
4. Software quality: quality management and assurance, risk analysis, program analysis, verification, validation, testing of software systems
5. Critical systems: real-time, distribution, fault tolerance, information technology, safety, security

6. Mainstream and emerging applications: multimedia and communications, manufacturing, robotics, avionics, space, health care, transportation
7. Parallel and distributed application technologies: programming techniques, languages, open MP applications, performance, optimizing compilers
8. Novel software technologies: programming paradigms, soft computing, software based on computational intelligence

Biometrics

1. Face localisation, face detection and face tracking in colour images
2. PCA, LDA and other methods a feature reduce and their applications in biometrics systems
3. Extracting features from face
4. Virtual faces and 3D facial models
5. Fingerprint and face recognition systems (authentication, access control, visitor identification, retrieval in database)
6. Image and video analysis, indexing and compression techniques (including mpeg-4 and mpeg-7 applications)
7. Image and video copyright management and authoring tools
8. Video streaming, video storage and server applications
9. Watermarking
10. Sound segmentation and indexing

Information technology security

1. Access control
2. Identification, authentication and digital signatures
3. Security infrastructures: TTP, PKI, etc.
4. Smartcards and security tokens
5. Security models and languages for security policies specification
6. Risk evaluation and management
7. Security and cryptographic protocols and applied cryptography
8. Security evaluation and confirmation (i.e. common criteria)
9. Trust models and trust management
10. Database security
11. Information flow and language-based security, mobile code
12. Intrusion detection system and firewalls
13. Network and operating systems security
14. Security in emerging network technologies: pervasive computing mobile, ad hoc and sensor networks
15. Legal issues, computer crime and information warfare

Information Systems for ODL (Open and distance learning)

1. System analysis of ODL
2. Intelligent Information Systems
3. Knowledge visualization in e-learning
4. Competency framework
5. Knowledge management
6. Virtual Laboratory
7. ODL production network
8. Quality issue

The primary focus is on high-quality original unpublished research, case studies, and implementation experiences. Papers should have practical relevance to the construction, evaluation, application, or operation of the systems. Theoretical papers must make convincing argument for the practical significance of the results.

Any other information details as committees, preparing the papers, invitation session (plenary papers) and payment see the ACS web site: <http://acs.wi.ps.pl>.

Paper Presentation

Keynotes and Invited Papers

Regular Papers (8-10 pages)

Oral Presentation and Posters

Publication

All submitted papers will go through a process of double-blind review before acceptance for its presentation at the conference and publication in the conference proceedings.

All accepted papers will be published in the special volume of the *Polish Journal of Environmental Studies* as the conference proceedings.

Instructions to Authors

Accepted camera ready copies should be written according to the attached instructions. The paper must be 8 to 10 pages, including abstract, key words, and references, and include the e-mail address of the corresponding author. Details are given on the websites of ACS: <http://acs.wi.ps.pl>.

Important Dates

May 11, 2007 Submission of the draft papers

June 15, 2007 Confirmation of the paper acceptance/rejection after review

July 31, 2007 Camera-ready paper submission and registrations fee

October 17-19, 2007 Conference

Conference Chairs

Prof. Włodzimierz Bielecki (Szczecin University of Technology, Poland)

Prof. Mirosław Kutyłowski (Wroclaw University of Technology, Poland)

Prof. Andrzej Piegat (Szczecin University of Technology, Poland)

Steering Committee

Imed El Fray (Szczecin University of Technology, Poland)

Koichi Kashiwagi (Ehime University, Japan)

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Jerzy Pejaś (Szczecin University of Technology, Poland)

Khalid Saeed (Szczecin University of Technology, Poland)

Eri Sato (Tokyo Metropolitan Institute of Technology, Japan)

Matthieu Voiry (Paris XII University, France)

International Programming Committee

Artificial intelligence:

Andrzej Piegat (Poland), chair (Szczecin University of Technology, Poland)

Anna Bartkowiak (Wroclaw University, Poland)

Alexander Dorogov (Saint-Petersburg State Electrotechnical University, Russia)

Gisella Facchinetto (University of Modena & Reggio Emilia, Italy)

Akira Imada (Brest State Technical University, Belarus)

Janusz Kacprzyk (Systems Research Institute, Polish Academy of Sciences, Poland)

Shin-ya Kobayashi (Ehime University, Japan)

Jonathan Lawry (University of Bristol, UK)
Kurosh Madani (Paris-XII University, France)
Witold Pedrycz (University of Alberta, Canada)
Orest Popov (Szczecin University of Szczecin, Poland)
Elisabeth Rakus-Andersson (Blekinge Institute of Technology, School of Engineering, Sweden)
Leszek Rutkowski (Czestochowa University of Technology, Poland)
Zenon Sosnowski (University of Finance and Management in Białystok, Poland)
Sławomir Wierzchoń (Institute of Computer Science, Polish Academy of Sciences, Poland)
Toru Yamaguchi, Tokyo Metropolitan University, Japan
Jan Węglarz (Poznań University of Technology, Poland)

Software Engineering:

Włodzimierz Bielecki, chair (Szczecin University of Technology, Poland)
Leon Bobrowski (Białystok Technical University, Poland)
Stefano Crespi (Politecnico di Milano, Italy)
Andrzej Goscinski (Deakin University, Australia)
Janusz Górska (Technical University of Gdańsk, Poland)
Dietbert Gütter, (Technical University of Dresden, Germany)
Piotr Habela (Polish-Japanese Institute of Information Technology, Poland)
Leszek Maciaszek (Macquarie University, Sydney, Australia)
Valery Rogoza (Szczecin University of Technology, Poland)
Macha Sosonkina (Scalable Computing Laboratory, Iowa State University, USA)

Biometrics:

Georgy Kukharev, chair (Szczecin University of Technology, Poland)
Leonid Kompanets (Czestochowa University of Technology, Poland)
Ryszard S. Choraś (University of Technology and Life Sciences, Poland)
Władysław Skarbek (Warsaw University of Technology, Poland)
Khalid Saeed (Białystok Technical University)

Information technology security:

Mirosław Kutyłowski, chair (Wrocław University of Technology, Poland)
Johannes Bloemer (Paderborn University, Germany)
Jos Dumortier (K.U.Leuven University, Belgium)
Mieczysław Kula (University of Silesia, Poland)
Eugeniusz Kuriata (University of Zielona Góra, Poland)
Matthias Krause (Mannheim University, Germany)
Josef Pieprzyk (Macquarie University, Australia)
Marian Srebrny (Institute of Computer Science, Polish Academy of Sciences, Poland)
Janusz Stokłosa (Poznań University of Technology, Poland)
Vyacheslav Yarmolik (Białystok Technical University, Poland)

Information Systems for ODL (Open and distance learning):

Oleg Zaikin, chair (Szczecin University of Technology, Poland)
Andrzej Cader (Academy of Humanities and Economics in Łódź, Poland)
Michelle Joab (LIRMM, Université Montpellier 2, France)
Emma Kusztina (Szczecin University of Technology, Poland)
Przemysław Różewski (Szczecin University of Technology, Poland)
Albert Sangrà (Universitat Oberta de Catalunya, Spain)

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