INTERNATIONAL CONFERENCE ON COMPUTER SYSTEMS AND TECHNOLOGIES "CompSysTech'14"

On June 27 2014 the University of Ruse hosted the XV-th in turn International Conference on Computer Systems and Technologies CompSysTech'14. The Conference was organized by THE ASSOCIATION FOR COMPUTING MACHINERY and by THE BULGARIAN ACADEMIC SOCIETY OF COMPUTER SYSTEMS AND INFORMATION TECHNOLOGIES and its OBJECTIVE is to intensify the information exchange of results in theoretical research and practical developments in this field.

CompSysTech'14 is organized under the patronage of:

- EUROPEAN COMMISSION Education, Audiovisual and Culture Executive Agency:
- Bulgarian Ministry of Education and Science;
- Bulgarian Academy of Sciences;
- Bulgarian Chapter of IEEE Computer Society;
- Bulgarian Chapter of IEEE Communications Society.

Only papers with three favourable reviews from three members of the Programme Committee, which includes leading scientists from around the world, were allowed.

At the beginning of the conference the String Quartet "Cherkin" at the State Opera Ruse performed the Europe Anthem "Ode to Joy" by Beethoven.





The Plenary Session was opened with a greeting address from the Rector of the University of Ruse - Prof. Hristo Beloev, DSc.





Dear Guests, Dear Colleagues,

It is my pleasure to WELCOME you, some of you for a second time, to our city and to our university!

We highly appreciate the efforts of the Academic Society in Computing, of which the Department of Computer Systems and Technologies in Ruse is a member, to have an active scientific life. The national and international projects of the society are fully supported by the management of the University of Ruse.

It is our pleasure and honour to host the CompSysTech International Conference for the SIXTH time. Although this is only the 15th edition of this conference, it is already well known not only in Bulgaria, but in Europe too. The fact that today in this hall there are scientists from 35 countries, is an eloquent evidence for this. Another evidence for the attractive power and the level of the conference is the fact that for the last 7 years the CompSysTech papers have been published in the Digital Library of the Association for Computing Machinery, the most prestigious organization if the field of Computing, and are indexed by SCOPUS. The profile of the conference in Google Scholar is very impressive, too.

I wish all participants in the conference successful presentations, beneficial contacts and a pleasant stay in our beautiful Danube city.

The deputy chair of the Union of Automatics and Informatics, Assoc. Prof. Benislav Vanev, greeted the participants in the conference and awarded the chair of the organising committee the Gold medal "Prof. Asen Zlatarov".





The Plenary Session comprised of the following papers:

- VIRGINIO CANTONI
 University of Pavia, Italy
 Eye-tracking systems, research and applications
- ATANAS RADENSKI Chapman University, California, USA Big Data, High-Performance Computing and MapReduce ICT-base for Scientific Research
- HANNU JAAKKOLA
 Tampere University of Technology, Finland
 Open Data Opportunities and Challenges

ELENA MARINOVA

President Musala Soft, BAIT Board member and Chair of Committee "Education"

The top challenges of the software business today - quality and quantity of people. How can business and universities work it out together?









The papers - a total of 61 - were allocated in 8 sections:

- Hardware 4;
- Computer Networks 4:
- Image Processing & Computer Vision 5;
- Data Mining, Information Retrieval & Natural Language Processing 8;
- Simulation and Modelling. Statistical Analysis. Intelligent Systems 7;
- Web Services and Cloud Computing 5;
- Software Engineering 6;
- The Youth and the ICT 5;

The Conference Programme also included a Co-Event – Workshop "Advances in high performance information services for digital, multilingual education (AHPISDME)" which comprised of 17 papers.

Scientists from 35 European countries participated in the conference with papers or as listeners.









Following nominations by the section chairpersons, the Programme Committee awarded a **"BEST PAPER"** crystal prize and honorary diplomas to the authors of the plenary reports as well as the following papers:

Session A "Hardware and Computer Networks":

- "IP Design for DIF and Integration in Nios II Systems: Averaging Filter" by Trifon Trifonov
- "Monitoring Software for IP based Video Surveillance System" by Delyan Genkov

Session B "Image Processing & Computer Vision":

 "Virtual Co-location to Support Remote Assistance for Inflight Maintenance in Ground Training for Space Missions"
 by Dragos Datcu, Marina Cidota, Stephan Lukosch, David Martinez Oliveir and Mikael Wolff

Session C "Data Mining, Information Retrieval & Natural Language Processing":

- "Design and Analysis of Novel Similarity Measure for Clustering and Classification of High Dimensional Text Documents"
 - by G.Suresh Reddy, Ananda Rao and Rajani Kanth
- "A web search methodology for health consumers"
 by Marco Alfano, Biagio Lenzitti and Giosuè Lo Bosco

Session D "Simulation and Modelling. Statistical Analysis. Intelligent Systems":

- "Intraday Stock Forecasting"
 by Victor Louwers and Leon Rothkrantz
- "Decentralised Control Optimisation for a Glass Furnace by SGA's" by Kumaran Rajarathinam, J. Barry Gomm, Karl Jones and Ahmed Saad Abdelhadi

Session E "Web Services and Cloud Computing":

- "Web service QoS specification in BPEL descriptions"
 by Krasimir Baylov, Dessislava Petrova-Antonova and Aleksandar Dimov
- Session F "Software Engineering":
 - "Can virtual reality be better controlled by a smart phone than by a mouse and a keyboard?"
 - by Alena Kovárová and Maroš Urbančo

Session G "Advances in high performance information services for digital, multilingual education (AHPISDME)":

- "Increasing the Flexibility of Automated Concept Map Based Knowledge Assessment"
 - by Maija Strautmane
- "Creating Software Engineering Student Interaction Profiles for Discovering Gamification Approaches to Improve Collaboration" by Antti Knutas, Jouni Ikonen, Dario Maggiorini, Laura Ripamont and Jari Porras
- "Academic dishonesty in a partially online environment: A survey" by Danijela Subotic and Patrizia Poscic
- "Automatized Test Item Generation in Moodle" by Mariyana Raykova, Hristina Kostadinova and George Totkov

• Session H "The Youth and the ICT":

"Cells' Evolution"
 by Emil Indjev, Syuzan Feimova

The prizes were provided by the Conference sponsors and were handed out by Prof. Boris Rachev.



















After the Session the participants took a tour around the University of Ruse and had a social evening at the Riga restaurant.







All the participants and guests of the conference share the opinion that its main goal "to intensify the information exchange of the results in theoretical research and practical developments in the field of Computing" has been widely achieved.

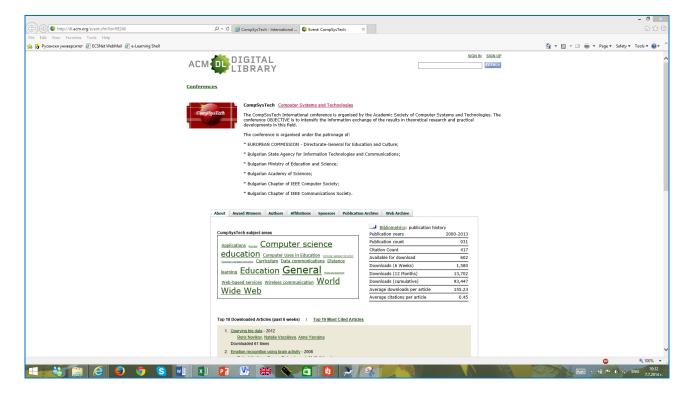
The proceedings have been published on paper and electronically on the conference Web site - http://www.compsystech.org/. All papers are in English, which is a premise for their popularization, referencing and quoting by other authors.



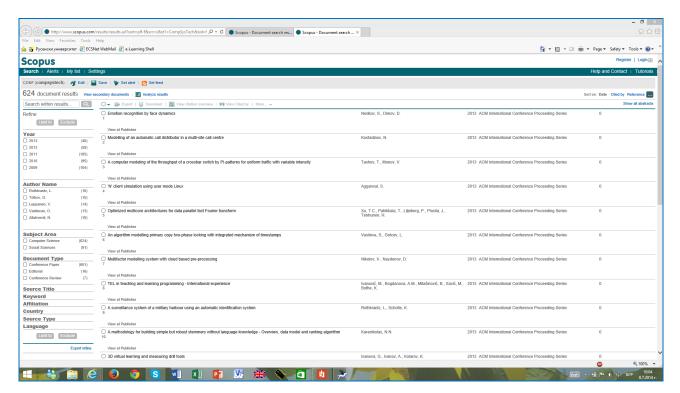


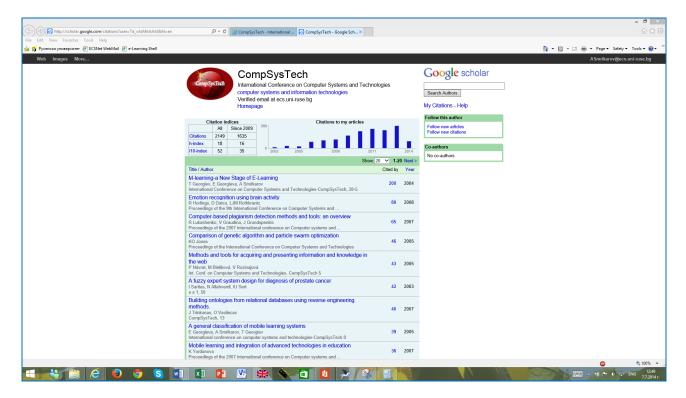
From 2007 the papers are published in the digital library of the Association for Computing Machinery (ACM).





The CompSysTech papers are indexed by SCOPUS.





The conference was announced in all regional media.

