
Global Communications Newsletter

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Student Paper Contest on Information Security SIBINFO

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Tomsk IEEE Chapter and Student Branch, Siberia Section

It is well known that a priority for ComSoc is to increase the activity in Chapters and student branches, and to support initiative projects. One of the projects of the Tomsk Chapter is the annual All-Russia Student Paper Contest on Information Security (SIBINFO), based on IEEE rules, which was successfully held for the third time in April 2003. In connection with the establishment of the Siberian IEEE Section in February 2003, this contest was the first event in the Section with technical support from ComSoc. The suggestion to start the contest came from the Tomsk Chapter Chair, who motivated Tomsk State University of Control Systems and Radioelectronics (TUSUR) to start this crusade.

The contest was organized by the Department of Complex Information Security of Computer Systems (KIBEVS TUSUR), the leading department in Siberia for the education of engineering students in the field of information security. The organization was supported by the Tomsk IEEE Chapter and Student Branch (<http://me.tusur.ru/~tieee>), the GOLD Affinity Group of the Siberia Section, and co-sponsored by the IEEE Communications Society (ComSoc) and the IEEE Foundation (project 2001-051). It should be noted that the contest was carried out successfully in many respects due to ComSoc's sponsorship.

No other Region 8 Chapter has carried out a similar contest. The two phases of the contest — paper and oral finale — attracted many Russian participants who discovered for themselves ComSoc and its benefits. The Student R&D Divisions in the Russian universities hold contests in training courses, but not at an international level.

Preparation of the Student Paper Contest started one year ago. The organizing committee sent more than 200 information letters to universities. Information about the contest was published on the Web site. More than 50 papers from 11 universities were accepted during the first stage of the contest. The commission of experts had to work for a month to review them all.

The examination of papers was anonymous, and the experts evaluated them on the following criteria: independence, essence of the technical contents, scientific novelty, informativeness and accuracy of the abstract, comprehensiveness of the conclusions, ordering and literacy of the text, ingenuity and resourcefulness in methods of presentation, choice of illustrations, use of analogies, and the like. In the end, the best 15 papers were selected for the oral finale.

The finalists were informed, and all of them came to Tomsk. We are not aware of such a representative delegation getting together before. Practically all participants came by train, making very long trips. Also, many specialists of leading

Tomsk organizations, students, and post-graduate students attended the contest.

On the morning of April 23, Professor A. A. Shelupanov, head of KIBEVS, opened the oral presentation in the conference hall of TUSUR. He told about the Department and Center of Information Security. After that, the participants of the contest presented their papers. Once again, a representative jury of respected professors evaluated the participants' performances.

Many interesting papers were presented during the contest: "Modern Methods of Building Digital Watermarks," on the use of watermarks for multimedia authentication and the problem of watermark stability against wipe attempts; "User Identification on Keyboard Marked Biometric Parameters, Using Artificial Neural Networks," about user recognition and identification by typing behavior; "Studying Safety Incidents, Using a Network System for Attack Detection," devoted to analytic methods of detection of system intrusions; "Enhancing Digital Signature Calculation Using a Dedicated Scheme," on a new algorithm of crypto transformation and compression; "Signal-Coding Model for the Insertion of Information in Sound for Hidden Data Transfer through the Sound Channel," with a practical demonstration; among others.

The participants did a lot of work on their computer presentations with amazing software demonstrations. Sometimes the participants were so involved in discussion that they forgot about time. All papers were accompanied by elaborate enthusiastic discussions by the participants, which was difficult to stop. All papers were very interesting for the audience.

After the presentations, some brief information about IEEE membership benefits was presented by the IEEE Chairman, while the jury decided the winners of the contest. All finalists of the contest were handed certificates and souvenirs. The winners were awarded prizes, diplomas, and valuable gifts.

After the oral presentations and awards ceremony, an excursion to the famous Tomsk attractions and neighborhoods was arranged for the contest participants. A professional guide told all about one of the oldest cities in Siberia. The guests enjoyed the wooden architecture of the city very much. Tomsk was founded in 1604, and its historical city is 400 years old. There are plenty of historical landscapes (Siberian taiga, cedar forests), and cultural and architectural objects to attract the attention of the visitor. It is possible to learn more about Tomsk on the Web at <http://eng.tomsk400.ru>.

Another interesting result of the contest was the establishment of some close contacts between colleagues working in the field of information security. While getting acquainted

(Continued on page 4)

8th IEEE Symposium on Computers and Communications (ISCC'03)

By Yurdaer Doganata, ISCC '03 Technical Program Co-chair

The Eighth IEEE Symposium on Computers and Communications (ISCC 2003) was held in Antalya, Turkey, 31 June–4 July, 2003. ISCC started in 1995 in response to the growing interaction between the fields of computers and communications. ISCC takes place annually at the beginning of July. Previous symposium locations have included Egypt, Greece, France, Tunis, Italy, and Turkey, with plans for other sites in the Mediterranean region. The ISCC has grown in strength and quality over the past eight years into an international forum where issues in many areas of computers and communications are addressed and discussed.

This year the number of submissions was double that of last year, in spite of the Iraqi War, SARS threat, and worldwide worsening economical situation. A record number of papers were submitted: 455, received from 40 countries. Twenty technical sessions in four tracks were organized to present accepted papers. The conference program focused on all aspects of computers, communications, and service provisioning over enhanced global telecommunications networks. The four days of the conference covered comprehensive topics in research and applications. This year's program consisted of sessions on Network Reliability and Quality of Service; Wireless, Cellular and Mobile Communications; Mobile Ad Hoc Networks; Distributed Systems, Control and Optimization of Communication Systems; Security, Privacy and Information Access, Signal Processing in Communication Networks, High Performance Networking and Protocols; Web-Based Systems and Network Management; Electronic Commerce; Internet Services and Applications; Management of Information Technology; Programmable and Active Networks; Multimedia Information Management and Exchange; Network Design, Operation, and Management; and Data Mining and Knowl-

edge Discovery and Applications. The program details can be found at the Web site, <http://www.comsoc.org/iscc/2003/>.

In addition to the technical program, two tutorials were held. The first, "Anytime, Anyplace, Anyhow Multimedia Wireless Access: The Vision of Mobile Ad Hoc Networking," was offered by Prof. George N. Angelo of the Institute of Technology, Athens, Greece; the second one, "Broadband Network and Service Management: From Concept to Products," was offered by Joseph Ghetie of Telcordia Technologies, USA.

Participants received a broad perspective through the keynote speeches delivered by six distinguished speakers: Prof. Claus Weyrich, Member of the Managing Board of Siemens AG, Head of Corporate Technology in Munich, Germany; Prof. Kemal Inan, Dean of Faculty of Engineering and Natural Sciences, Sabanci University, Istanbul; Faruk Eczacibasi, Vice President of Eczacibasi Holding, President of Eczacibasi Information Technologies Inc., Turkey; Prof. Sartaj Sahni, Chair, CISE, University of Florida, USA, Giuliano Di Vitanonio, HP Labs Palo Alto, USA; Prof. Jean-Jacques Quisquater, Université Catholique du Louvain, Belgium.

The panel organized by Prof. Mehmet Ulema brought together many experts in the field of wireless networks who discussed various exciting aspects of next-generation wireless networks and services.

The Best Paper award went to Moufida Maimour and Cong Duc Pham for their paper, "AMCA Active Based Multicast Congestion Avoidance Algorithm." The Best Student Paper Award went to Mustafa Ergen, Duke Lee, Raja Sengupta, and Pravin Varaiya for "Wireless Token Ring Protocol — Performance Comparison with IEEE 802.11." There were two awards for Best Local Papers. These awards went to Ozgur Ercetin and Leandros Tassioulas for "Pricing and Peering Strategies of Differentiated Services Content Networks," and M. Pazarci for "Data Embedding in Scrambled Digital Video."

We are indebted to many individuals whose contributions made this conference possible. In particular, general co-chairs Dr. Ahmed Tantawi and Prof. Kemal Inan, technical program co-chair Prof. Phuoc Trangia, local chairs Prof. Ezhan Karasan and Prof. Nail Akar, registration chair Prof. Reda Ammar, tutorial chair Prof. Cem Ersoy, and Web chair Dr. Kurt Tutschku. We are also very grateful to all TPC members, steering committee members, and reviewers for their diligent work under very tight schedules.

We are confident that ISCC will continue to attract many good technical papers and discussions, and foster an excellent environment in which to meet friends and colleagues (more information at <http://www.comsoc.org/iscc/2003/>).

STUDENT PAPER CONTEST/(cont'd from page 1)

with professionals more involved in business administration than in engineering, we figured out that they were actually becoming very interested in information security questions. Moreover, after the contest we received emails from about 20 people interested in ComSoc activities. We achieved one of the most important duties of a chapter: recruiting new members for our Society.

In summary, we want to thank you, the new IEEE Student Branch members, as well as the management of KIBEVs for your active participation in organizing SIBINFO-2003, and of course all the contest participants. We would like to hear your opinions and comments in order to improve the contest organization.

The contest has become a tradition. The participants have noted a high level of quality, which has improved year by year; it will soon transform into a real international contest. We wish you success and look forward to meeting you at SIBINFO 2004!

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