News

# Professor Erol Gelenbe –
# Winner of the "In Memoriam Dennis Gabor" Award

**Prof. Erol Gelenbe, IEEE Fellow and Communications Society member, also a member of our Editorial Board, has recently received the prestigious "In Memoriam Dennis Gabor Award" for outstanding research with important impact in innovation.**

The "In Memoriam Dennis Gabor" Award is awarded by the NOVOFER Foundation of the Hungarian Academy of Sciences for outstanding scientific achievements with practical applications. It is named after Dennis Gabor, the inventor of holography, the 1971 Nobel Prize Winner in Physics. The award ceremony was held on 19 December 2013 in the building of the Hungarian Parliament.

Professor Gelenbe's practical inventions include the design of the first random access fibre-optics local area network, a patented admission control technique for ATM networks, a neural network based anomaly detector for brain magnetic resonance scans, and the "cognitive packet network" routing protocol to offer quality of service to users. He is known for contributing fundamental results on stability and control of random access communications, for inventing G-Networks an important generalisation of queuing networks, and the random neural network model.

Also Fellow of ACM, he won the 2008 ACM SIGMETRICS Life-Time Achievement Award for being "the single individual who over a span of thirty years has made the greatest overall contribution" to computer and communication system performance. He was elected to the French National Academy of Engineering (2007) and to the Hungarian (2010) and Turkish (2007) Science Academies and he is also a Foreign



*Erol Gelenbe (center), Winner of the Dennis Gabor Award with József Pálinkás (left), President of the Hungarian Academy of Sciences and József Gyulai (right), Chairman of the selection committee*

Member of the Science Academy of Poland. From 1984 to 1986 he served as the Science and Technology Advisor to the French Secretary of State for Universities. He founded the ISCIS (International Symposium on Computer and Information Sciences) series of conferences that since 1986 are held annually to bring together Turkish computer engineers and scientists with their international counterparts.

Let us quote Professor Gelenbe's interesting speech at the awarding ceremony.

*"Gabor Denes was indeed a giant, for his scientific contributions to physics that won him the Nobel Prize,*

*for his great inventions, and his commitment to Europe and to his home country. He could have moved to America at several stages of his career, but chose to remain in Europe, and he contributed actively to the European idea.*

*Like him, many Hungarians have shaped Europe and the world through contributions to the arts, and to science and technology. Hungarians forged the great cannon for the siege of Constantinople in 1453. Hungarians introduced the printing press to Istanbul. Bartok wrote about the music of Anatolia and the Balkans. In the 20th century, the Hungarians Szilard and Teller contributed greatly to western security, and Wigner shaped our understanding of the universe.*

*I was born in Istanbul, but my scientific links with Budapest and Debrecen were developed while I worked in France, of which I am an active citizen. These Hungarian-Turkish-French links are interesting. The Baron Francois de Tott, born in Chamigny, France in 1733, worked in Turkey from 1755, and died in Austro-Hungary. Descended from Hungarians who had emigrated to the Ottoman empire and then moved to France with Count Miklós Bercsényi, he founded with my ancestor the Turkish mathematician Gelenbevi Ismail, the first Ottoman engineering academy. He had a role in Turkey similar to another French engineer, the Count (Comte) de Bonneval. My great-grandfather was Magyar Ibrahim Pasha, a naval doctor, and my paternal uncle, then a student, died in this city after the First World War.*

*In my own field, without John von Neumann, George Pólya, Paul Erdős and Rudolph Kalman, can we imagine the revolution in computation and automation? Today without Béla Bollobás and Albert Barabási can we understand the Internet?*

*As I recall our debts to Hungary, and the genii of Hungary in science and the arts, I thank you and stand humbled to receive the "in memoriam Dennis Gabor award", in this country that has so much impacted science and innovation."*

# Guidelines for our Authors

## Format of the manuscripts

Original manuscripts and final versions of papers should be submitted in IEEE format according to the formatting instructions available on

*http://www.ieee.org/publications_standards/ publications/authors/authors_journals.html#sect2,*

"Template and Instructions on How to Create Your Paper".

## Length of the manuscripts

The length of papers in the aforementioned format should be 6-8 journal pages.
Wherever appropriate, include 1-2 figures or tables per journal page.

## Paper structure

Papers should follow the standard structure, consisting of *Introduction* (the part of paper numbered by "1"), and *Conclusion* (the last numbered part) and several *Sections* in between.
The Introduction should introduce the topic, tell why the subject of the paper is important, summarize the state of the art with references to existing works and underline the main innovative results of the paper. The Introduction should conclude with outlining the structure of the paper.

## Accompanying parts

Papers should be accompanied by an *Abstract* and a few *index terms (Keywords)*. For the final version of accepted papers, please send the *short cvs* and *photos* of the authors as well.

## Authors

In the title of the paper, authors are listed in the order given in the submitted manuscript. Their full affiliations and e-mail addresses will be given in a footnote on the first page as shown in the template. No degrees or other titles of the authors are given. Memberships of IEEE, HTE and other professional societies will be indicated so please supply this information. When submitting the manuscript, one of the authors should be indicated as corresponding author providing his/her postal address, fax number and telephone number for eventual correspondence and communication with the Editorial Board.

## References

References should be listed at the end of the paper in the IEEE format, see below:

a) Last name of author or authors and first name or initials, or name of organization
b) Title of article in quotation marks
c) Title of periodical in full and set in italics
d) Volume, number, and, if available, part
e) First and last pages of article
f) Date of issue

*[11] Boggs, S.A. and Fujimoto, N., "Techniques and instrumentation for measurement of transients in gas-insulated switchgear," IEEE Transactions on Electrical Installation, vol. ET-19, no. 2, pp.87–92, April 1984.*

Format of a book reference:

*[26] Peck, R.B., Hanson, W.E., and Thornburn, T.H., Foundation Engineering, 2nd ed. New York: McGraw-Hill, 1972, pp.230–292.*

All references should be referred by the corresponding numbers in the text.

## Figures

Figures should be black-and-white, clear, and drawn by the authors. Do not use figures or pictures downloaded from the Internet. Figures and pictures should be submitted also as separate files. Captions are obligatory. Within the text, references should be made by figure numbers, e.g. "see Fig. 2."
When using figures from other printed materials, exact references and note on copyright should be included. Obtaining the copyright is the responsibility of authors.

## Contact address

Authors are requested to send their manuscripts via electronic mail or on an electronic medium such as a CD by mail to the Editor-in-Chief:

*Csaba A. Szabo*
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# Call for Papers

Prospective authors are invited to submit original research papers for publication in the upcoming issues of our Infocommunications Journal.

Topics of interests include the following areas:
- Data and network security
- Digital broadcasting
- Infocommunication services
- Internet technologies and applications
- Media informatics
- Multimedia systems
- Optical communications
- Society-related issues
- Space communications
- Telecommunication software
- Telecom. economy and regulation
- Testbeds and research infrastructures
- Wireless and mobile communications

Theoretical and experimentation research results achieved within the framework of European ICT projects are particularly welcome. From time to time we publish special issues and feature topics so please follow the announcements. Propo-sals for new special issues and feature topics are welcome.

Our journal is currently published quarterly and the editors try to keep the review and decision process as short as possible to ensure a timely publication of the paper, if accepted. As for manuscript preparation and submission, please follow the guidelines published on our website
http://www.infocommunications.hu/for_our_authors.

Authors are requested to send their manuscripts via electronic mail (preferably) or on a CD by regular mail to the Editor-in-Chief:

*Csaba A. Szabo*
*Dept. of Networked Systems and Services,*
*Budapest University of Technology and Economics*
*2 Magyar Tudosok krt., Budapest 1117 Hungary*
*e-mail: szabo@hit.bme.hu*

# Call for Proposals of Special Issues

Infocommunications Journal welcomes proposals for Special Issues – collections of papers dedicated to a particular topic of interest for the readers of the journal.

A Special Issue can be based on a recent high quality workshop or conference or papers can be collected from open call. Invited papers can be part of the special issue as well.

A Special Issue can fill in a whole issue, in which case the number of papers is expected to be 8 to 10, or it can be a Mini – Special Issue. In the latter case, at least 3, preferably 4 papers are required.

Proposals for special issues should include:
- contact information
  (name, e-mail, title, affiliation and address);
- resume(s) of the proposer(s), with a representative list
  of recent publications and related experience
  (Editorial Board memberships, Guest Editorships,
  or roles in relevant conferences' program committees);
- the proposed title for the special issue;
- the way the special issue will be compiled
  (contributions solicited from a technical event,
  or to be collected from call for this special issue;
- intent to include invited papers should be also indicated,
  if possible with the names of professionals who are
  planned to be invited;
- scope and motivation and description of
  the special issue;
- guest editors (if different from the proposers) with
  detailed contact information and resumes.

Proposals should be sent to the Editor-in-Chief:

*Csaba A. Szabo*
*Dept. of Networked Systems and Services,*
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*2 Magyar Tudosok krt., Budapest 1117 Hungary*
*e-mail: szabo@hit.bme.hu*

# WCNC 2015

## IEEE WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE
### NEW ORLEANS, LA, USA • 9-12 March, 2015

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IEEE COMMUNICATIONS SOCIETY

www.ieee-wcnc.org

IEEE WCNC is the premier event for wireless communications researchers, industry professionals, and academics interested in the latest development and design of wireless systems and networks. Sponsored by the IEEE Communications Society, IEEE WCNC has a long history of bringing together industry, academia, and regulatory bodies. In 2015, New Orleans will become the wireless capital by hosting IEEE WCNC 2015. The conference will include technical sessions, tutorials, workshops, and technology and business panels. You are invited to submit papers in all areas of wireless communications, networks, services, and applications. The instructions for authors will be posted on the conference website www.ieee-wcnc.org/2015. Potential topics include, but are not limited to:

## CALL FOR PAPERS

### Track 1: PHY and Fundamentals
- Interference characterization
- Cognitive radio, ultra-wideband
- Multihop and cooperative communications
- Modulation, coding, diversity
- Equalization, synchronization, channel estimation
- Space-time coding, MIMO, adaptive antennas
- OFDM, CDMA, spread spectrum
- Channel modeling and characterization
- Interference cancellation and multiuser detection
- Iterative techniques
- Information-theoretic aspects of wireless communications
- Signal processing for wireless communications
- Propagation models for high frequency channels

### Track 2: MAC and Cross-Layer Design
- Multiple access techniques
- Cognitive and cooperative MAC
- Collaborative algorithms
- MAC for mesh, ad hoc, relay, and sensor networks
- Network information theory
- Radio resource management and allocation, scheduling
- Cross-layer design, cross-layer security
- Software defined radio, RFID
- Adaptability and reconfigurability
- Wireless MAC protocols: design and analysis
- B3G/4G Systems, WiMAX, WLAN, WPAN
- QoS provisioning in MAC

### Track 3: Mobile and Wireless Networks
- Localization for wireless networks
- Network estimation and processing techniques
- Mesh, relay, sensor and ad hoc networks
- Mobility, location, and handoff management
- Mobile and wireless IP
- Wireless multicasting, routing
- Robust routing
- Multimedia QoS and traffic management
- Wireless broadcast, multicast and streaming
- Congestion and admission control
- Proxies and middleware for wireless networks
- Wireless network security and privacy
- Performance of E2E protocols over wireless networks
- Interworking heterogeneous wireless/wireline networks
- Capacity, throughput, outage, coverage

### Track 4: Services, Applications, and Business
- Emerging wireless/mobile applications
- Context and location-aware wireless services & applications
- Wireless telemedicine and e-health services
- Intelligent transportation systems
- Cognitive radio and sensor-based applications
- Content distribution in wireless home environment
- Wireless emergency and security systems
- Service oriented architectures, service portability
- SIP based services, multimedia, QoS support, middleware
- Innovative user interfaces, P2P services for multimedia
- Dynamic services, autonomic services
- Regulations, standards, spectrum management
- Test-bed and prototype implementation of wireless services
- Personalization, service discovery, profiles and profiling

## CALL FOR TUTORIALS AND WORKSHOPS
Proposals for tutorials and workshops are solicited on hot topics for future wireless communications systems and applications.

## CALL FOR PANELS
Panel proposals are also solicited on technical, business and policy-related issues and opportunities for the wireless communications industry.

**PLEASE NOTE:** To be published in the IEEE WCNC 2015 Conference Proceedings and to be eligible for publication in IEEE Xplore®, an author of an accepted paper is required to register for the conference at the full or limited (member or non-member) rate and the paper must be presented by an author of that paper at the conference unless the TPC Chair grants permission for a substitute presenter arranged in advance of the event and who is qualified both to present and answer questions. Non-refundable registration fees must be paid prior to uploading the final IEEE formatted, publication-ready version of the paper. For authors with multiple accepted papers, one full or limited registration is valid for up to 3 papers. Accepted and presented papers will be published in the IEEE IEEE WCNC 2015 Conference Proceedings and submitted to IEEE Xplore®.

A portion of the accepted papers will be presented as posters. The IEEE WCNC 2015 Technical Program Committee will decide which papers will be presented in oral (lecture type) sessions and which papers as posters, and the decisions will be announced to the authors. Choice between oral and poster presentations will be totally independent of the review scores and of the paper quality.

## IMPORTANT DATES

| | | | |
|---|---|---|---|
| Paper submission deadline: | 1 August 2014 | Tutorial proposals: | 1 August 2014 |
| Notification of acceptance: | 15 November 2014 | Workshop proposals: | 1 June 2014 |
| Final Camera-ready papers due: | 15 December 2014 | Panel proposals: | 1 August 2014 |

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# SCIENTIFIC ASSOCIATION FOR INFOCOMMUNICATIONS

## Who we are

Founded in 1949, the Scientific Association for Infocommunications (formerly known as Scientific Society for Telecommunications) is a voluntary and autonomous professional society of engineers and economists, researchers and businessmen, managers and educational, regulatory and other professionals working in the fields of telecommunications, broadcasting, electronics, information and media technologies in Hungary.

Besides its more than 1300 individual members, the Scientific Association for Infocommunications (in Hungarian: Hírközlési és Informatikai Tudományos Egyesület, HTE) has more than 60 corporate members as well. Among them there are large companies and small-and-medium enterprises with industrial, trade, service-providing, research and development activities, as well as educational institutions and research centers.

HTE is a Sister Society of the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the IEEE Communications Society. HTE is corporate member of International Telecommunications Society (ITS).

## What we do

HTE has a broad range of activities that aim to promote the convergence of information and communication technologies and the deployment of synergic applications and services, to broaden the knowledge and skills of our members, to facilitate the exchange of ideas and experiences, as well as to integrate and harmonize the professional opinions and standpoints derived from various group interests and market dynamics.

To achieve these goals, we…

- contribute to the analysis of technical, economic, and social questions related to our field of competence, and forward the synthesized opinion of our experts to scientific, legislative, industrial and educational organizations and institutions;
- follow the national and international trends and results related to our field of competence, foster the professional and business relations between foreign and Hungarian companies and institutes;
- organize an extensive range of lectures, seminars, debates, conferences, exhibitions, company presentations, and club events in order to transfer and deploy scientific, technical and economic knowledge and skills;
- promote professional secondary and higher education and take active part in the development of professional education, teaching and training;
- establish and maintain relations with other domestic and foreign fellow associations, IEEE sister societies;
- award prizes for outstanding scientific, educational, managerial, commercial and/or societal activities and achievements in the fields of infocommunication.

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