

# 3rd IEEE Conference on Cognitive Infocommunications

## Call for Papers

IEEE CogInfoCom 2012

TUKE, Košice, Slovakia  
December 2-5, 2012



<http://conf.uni-obuda.hu/coginfocom2012>

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### International Organizing Committee

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### Contact address

[ieee.coginfocom2012@sztaki.mta.hu](mailto:ieee.coginfocom2012@sztaki.mta.hu)

### Secretary General

Anikó Szakál, Óbuda University, Hungary

**Organizers:** MTA SZTAKI, BME TMIT, Óbuda University,  
Technical University of Košice, Elfa s.r.o

**Sponsors:** IEEE Hungary Section, IEEE Joint Chapter of IES  
and RAS, Hungary

**Scientific co-sponsor:** ANU-SCS, Australia

**Technical sponsor:** IEEE Industrial Electronics Society

**Technical co-sponsor:** Visionair Project

**Industrial co-sponsor:** Vitályos Consulting

**Scope:** Cognitive infocommunications (IEEE CogInfoCom) investigates the link between the research areas of infocommunications and cognitive sciences, as well as the various engineering applications which have emerged as the synergic combination of these sciences.

The primary goal of CogInfoCom is to provide a systematic view of how cognitive processes can co-evolve with infocommunications devices so that the capabilities of the human brain may not only be extended through these devices, irrespective of geographical distance, but may also interact with the capabilities of any artificially cognitive system. This merging and extension of cognitive capabilities is targeted towards engineering applications in which artificial and/or natural cognitive systems are enabled to work together more effectively. For more detailed information please visit the official home-site of cognitive infocommunications at [www.coginfocom.hu](http://www.coginfocom.hu).

### Contributions are expected from the following areas

Affective computing

Augmented cognition (AugCog)

Body area network

Brain-computer interface

Cognitive informatics and media

Cognitive linguistics

Cognitive robotics

Cognitive science

Ethology-inspired engineering

Etho-robotics

3D visualization and interaction

Future internet

Human-computer and Human-robot

interaction

iSpace research

Interactive systems engineering

Media Informatics

Multimodal interaction

Real and virtual avatars

Sensory substitution & sensorimotor extension

Teleoperation

Vehicle informatics

Virtual Reality Technologies and Scientific

Visualization

The authors are encouraged to submit full papers describing original, previously unpublished, complete research, not currently under review by another conference or journal, addressing state-of-the-art research and developments. All papers will be reviewed and accepted papers will appear in the conference proceedings. Papers must be submitted electronically via EasyChair in IEEE format (double column A/4, 4-6 pages long).

**IEEE:** All accepted papers which meet IEEE requirements are going to be included into IEEE Xplore database after the conference.

### Authors' Schedule – DEADLINE EXTENDED!!!

Full paper submission: **October 7, 2012** / Notification: **October 21, 2012** / Final submission: **November 10, 2012**

### Journal Publications

Selected Best Papers will be chosen (based on the quality and the level of presentation), to be submitted in CogInfoCom special issues of *International Journals*.

### Track Committees

Those who would like to form a track committee to initiate new tracks in their fields of science or to introduce the results of the partners of their large scale international projects in one track are warmly welcome. Please kindly note that the minimum number of sessions is 3 per track and 1 session is of 4 publications. DEMO sessions and DEMO track organizers are also warmly welcome! Already submitted track proposals:

**Track I:** Augmented Social Intelligence / Speech Science (Helen Meng, Nick Campbell, Géza Németh)

**Track II:** Cognitive Ergonomics / Human Factors of Infocommunication (Károly Hercegf, Anita Komlódi, Laura Slaughter)

**Track III:** Vision-based Human Computer Interaction (Tamás Szirányi, Zoltán Vidnyánszky)

**Track IV:** Ethological Aspects of Communication between Heterogeneous Agents (Ádám Miklósi)

**Track V:** Cognitive Mobile Applications and Services (Hassan Charaf)

**Track VI:** Communicative Social Signals: Computational and Behavioural Aspects of Human-Human and Human-Machine Interaction (Anna Esposito, Klara Vicsi, Alessandro Vinciarelli)

**Track VII:** Cognition (Claudiu Pozna, Radu-Emil Precup)

**Track VIII:** Visionair Project (Frédéric Noël)

**Track IX:** Emerging CogInfoCom Technologies in Industrial Oriented Research (Bjorn Solvang)

**Session I:** Human System Interaction (László Kovács, Szilveszter Kovács)

**Session II:** Theoretical Aspects of Cognitive Infocommunications (Péter Baranyi, Ádám Csapó)

### Technical Program Committee Chair

Károly Hercegf, BME, Hungary

### Technical Program Committee Co-Chair

Ádám Csapó, MTA SZTAKI, Hungary

### Technical Program Committee

Dawn Behne, NTNU, Norway  
Géza Bognár, GDF, Hungary  
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Bjorn Solvang, NUC, Norway

István Varga, BME, Hungary

Klára Vicsi, BME TMIT, Hungary

Zoltán Vidnyánszky, PPKE, Hungary

István Winkler, MTA, Inst. Cognitive Neuroscience & Psych.

Yeung Yam, Chinese University of Hong-Kong, China



# 3rd IEEE Conference on Cognitive Infocommunications

## Call for Demonstration

~ A venue for science, future professionals and industry representatives to meet ~

### The IEEE CogInfoCom 2012 organizing committee invites proposals for demonstrations to be given at the conference.

The demonstrations provide a forum for researchers as well as industry participants to demonstrate working systems, applications, tools or showcases of basic technologies to the conference attendees. The goal of the demonstrations is to showcase a spectrum of applications ranging from research prototypes to pilot solutions and even products that use cognitive infocommunications technology and provide functionality in the context of cognitive learning and information technology. For submissions to this event, it is very important to describe the demonstration setup, functionality and benefit to the viewer of the demonstration. Technical background discussion can be presented at the actual demonstration or can be submitted as an industry track or regular conference paper; the focus of the demonstrations themselves should be to show the functionality to viewers. Demonstrations are expected to be highly interactive.

### Topics for demonstrations include but are not limited to:

Affective computing	Future internet
Augmented cognition (AugCog)	Human-computer and Human-robot interaction
Body area network	iSpace research
Brain-computer interface	Interactive systems engineering
Cognitive informatics and media	Media Informatics
Cognitive linguistics	Multimodal interaction
Cognitive robotics	Real and virtual avatars
Cognitive science	Sensory substitution & sensorimotor extension
Ethology-inspired engineering	Teleoperation
Etho-robotics	Virtual Reality Technologies and Scientific Visualization
3D visualization and interaction	Vehicle informatics

Demonstrations ideally showcase a system or application that clearly underlines the benefit of using and deploying cognitive infocommunications technologies. In addition, tools and basic technologies that implement or use cognitive infocommunications or cognitive infocommunications approaches are invited for demonstration. *Any devices or hardware/software developments which build on, take into account and/or enable interaction between various levels of natural/artificial cognitive capabilities are welcome!*

### Demonstration Setup

The demonstrations are planned to be a single event during the conference, open to all conference attendees, with the goal of open and constructive discussions. One table will be provided with power as well as Internet connection. Posters can be displayed behind or next to the tables (depending on the space) either on pin boards or the wall. Demonstrators must bring any additional equipment they require as no equipment will be provided by the conference.

### Demonstration Submissions

Authors submitting papers to the demonstrations must submit a 1/2-page paper that clearly outlines the demonstration that will be set up and the functionality a visitor to the demonstration can observe. The technical background, such as the architecture or algorithms, should not be described in detail; such a description would best be submitted to the industry track or main conference paper track. Including links to supporting material, e.g. a video on the web or a web-based demo itself, is highly encouraged. All submissions must follow the specific submission guidelines on the COGINFOCOM2012 web page. The accepted demonstration submissions will be included in the conference proceedings.

**Please kindly indicate the intention of your DEMO participation via e-mail at your earliest convenience in order to help the organization of the event. Please include "[COGINFOCOM2012-DEMO]" in the subject of your emails and send them to [ieee.coginfocom2012@sztaki.mta.hu](mailto:ieee.coginfocom2012@sztaki.mta.hu).**

### Important Dates

Demo Submission: 15 October, 2012  
Notification: 10 November, 2012

**Conference: 2-5<sup>th</sup> December, 2012 at the Technical University of Kosice, Slovakia**

### Submissions

Researchers and practitioners are invited to submit demo proposals to the demo co-chairs: to be decided

### Note:

Every demo paper accepted for publication in the Proceedings of 3<sup>rd</sup> IEEE CogInfoCom 2012 MUST be presented during the conference.

