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2ND CALL FOR PAPERS

The 20th International Conference on Neural Information Processing (ICONIP 2013), an annual conference of the Asia Pacific Neural Network Assembly (APNNA), will be held from 3 - 7 November 2013 at EXCO, Daegu, Republic of Korea. We hope that you will take advantage of this unique opportunity to interact and share your experience with your colleagues and peers, and have a memorable and rewarding experience during your time in Daegu, Republic of Korea.

KEYNOTE / PLENARY SPEAKERS

The organizing committee is pleased to announce that outstanding keynote speaker and plenary speakers will give great speeches on ICONIP 2013 as below.

■ Keynote Speaker

Prof. Shun-ichi Amari, Brain Science Institute, RIKEN, Japan
"Dreaming of Mathematical Neuroscience for Half a Century"

■ Plenary Speakers

Prof. Yoshua Bengio, University of Montreal, Canada
"Deep Learning of Representations"

Prof. Kunihiko Fukushima, Kansai University, Japan
"How to design multi-layered neural networks for vision"

Prof. Soo-Young Lee, KAIST, Korea

"Artificial Cognitive Systems with Active Learning and Situation Awareness Abilities: From Cognitive Science to Real-World Applications"

Prof. Naftali Tishby, The Hebrew University, Israel

"Balanced information flow in perception and action - the key principle of computational intelligence?"

Prof. Zongben Xu, Xi'an Jiaotong University, China

"Nonlinear Sparsity: Examples, Modeling and Applications"

CONFERENCE SCOPE AND THEMES

Prospective authors are invited to contribute high-quality papers related to the topics listed below. The scope of the conference includes, but is not limited to, the following areas:

Cognitive Science and Artificial Intelligence: Theoretical, computational, or experimental studies of perception, psychophysics, learning and memory, inference and reasoning, problem solving, natural language processing, and neuropsychology.

Learning Theory, Algorithms, and Architectures: Stability and convergence analysis, statistical learning algorithms, neural network models, supervised learning, unsupervised learning, reinforcement learning, kernel methods, graphical models, dimensionality reduction and manifold learning, statistical and information-theoretic methods, generalization, regularization and model selection, Gaussian processes and mixture models, matrix/tensor analysis, statistical physics of learning, and evolutionary algorithms.

Computational Neuroscience and Brain Imaging: Theoretical and experimental studies of processing and transmission of information in biological neurons and networks, spiking neurons, visual and auditory cortex, neural encoding and decoding, plasticity and adaptation, brain imaging, neuroimaging, brain mapping, and brain segmentation.

Vision, Speech and Signal Processing: Biological and machine vision, image processing and coding, visual perception and modeling, visual selective attention, visual coding and representation, object detection and recognition, motion detection and tracking, natural scene analysis, image processing, auditory perception and modeling, source separation, speech recognition and speech synthesis, speaker identification, and audio & speech retrieval.

Control, Robotics and Hardware Technologies: Decision and control, exploration, planning, navigation, Markov decision processes, game playing, multi-agent coordination, neuro-fuzzy system, cognitive robotics, developmental robotics, analog and digital VLSI, neuromorphic engineering, computational sensors and actuators, microrobotics, bioMEMS, neural prostheses, photonics, and molecular & quantum computing.

Novel approaches and Applications: Innovative applications that use machine learning, including systems for time series prediction, bioinformatics, systems biology, text/web analysis, multimedia processing, adaptive intelligent systems, brain-computer interfaces, granular computing, hybrid intelligent systems, neuroinformatics and neuroengineering, bioinformatics, information retrieval, data mining, and knowledge discovery.

PAPER SUBMISSION

Authors are invited to submit full-length papers (8 pages maximum) by the submission deadline through the online submission system. It is also possible to submit extended abstracts which include the aim or rationale for the following specific topics: **Neuroscience, Neuro-psychology, Industrial applications, Cognitive science, and Demonstration.**

The submission of a paper implies that the paper is original and has not been submitted under review, or copyright-protected elsewhere and will be presented by an author if accepted. All submitted papers will be reviewed by area experts based on the criteria of originality, significance, quality, and clarity. The authors of accepted papers will have an opportunity to revise their papers and take consideration of the reviewers' comments and suggestions. The proceedings of ICONIP 2013 will be published by Springer in its series of Lecture Notes in Computer Science. Selected papers will be included in special issues of the following international journals.

- Neural Networks
- Neurocomputing
- Cognitive Computation
- Cognitive Systems Research
- Neural Processing Letters

IMPORTANT DATES

- Deadline for Special session, Tutorials and Workshops proposals
..... **15 May 2013**
- Deadline for extended abstract, regular and special session paper
..... **15 June 2013**
- Notification of acceptance
..... **1 August 2013**
- Deadline for Camera-ready final paper submission
..... **15 August 2013**



CALL FOR SPECIAL SESSION / WORKSHOP PROPOSALS

ICONIP2013 welcomes proposals for special sessions/workshop. Special session will be held during the conference. The aim of a special session is to provide the state-of-the-art and current research direction in specific fields of neural information processing. The special sessions devoted to emerging topics with growing attention are particularly encouraged. We also invite proposals for full-day or half-day workshops in relevant and current topics in neural information processing. Workshops will be held on 3 November 2013, the first day of the conference. A workshop should include an introductory talk on the topic and will have final discussions at the end of the workshop. Apart from the introductory talk and the discussion, workshop should preferably include six or more additional presentations.

Researchers and prospective organizers are invited to submit a one-page proposal for a special session/workshop to the ICONIP 2013 secretariat or each chair via the following emails before **15 May 2013**.

■ **ICONIP 2013 Secretariat:** iconip2013@gmail.com

■ Special session Chairs:

Prof. Sung-Bae Cho, Yonsei University, Korea / sbcho@cs.yonsei.ac.kr
 Prof. Seiichi Ozawa, Kobe University, Japan / ozawasei@kobe-u.ac.jp
 Prof. Liqing Zhang, Shanghai Jiao Tong University, China / zhang-lq@cs.sjtu.edu.cn

■ Workshop Chairs:

Prof. Seong-Whan Lee, Korea University, Korea / swlee@image.korea.ac.kr
 Prof. Daijin Kim, POSTECH, Korea / dkim@postech.ac.kr
 Mr. Kyunghwan Kim, NT Research, Korea / kimk@ntresearch.net

Each proposal should include the following information:

- The title of the special session or workshop
- The organizers with their affiliations
- A description of why the topic is of special interest and how it fits to the scope of ICONIP
- A list of potential authors or contributors
- The name(s) of the presenter(s) of the introductory talk (Only for workshop proposal)
- A theme for the discussion (Only for workshop proposal)

For more details for special session/workshop proposals, please visit the ICONIP 2013 website (www.iconip2013.org).

DAEGU, KOREA

Daegu Metropolitan City is the third largest city in Korea and is located in the southeastern part of the Korean peninsula. With an efficient transportation network linked in all directions, Daegu Metropolitan City is a gateway to numerous cultural heritages and tourist attractions, all proudly displaying the unique Korean culture. The organizing committee of ICONIP 2013 welcomes you to experience and enjoy the following tour programs.

■ Historical/Cultural Tour - "UNESCO World Cultural Heritage sites"

Andong Folk Village, Yangdong Folk Village, Seokguram Grotto, Bulguksa Temple and Tripitaka Koreana.

■ Industrial Tour

The hub of knowledge-based industry in northeast Asia
 : Daegu Metropolitan City is a place where industry thrives.

■ Korean Waive Tour - Korean drama/movie Theme

Which is your favorite Korean drama or movie?

If you are not sure, come and join us in this tour that includes the filming locations of drama 'Love Rain', movie 'Dae Jang-Geum' and 'Queen Seon Deok'.



ACCOMMODATION

For all participants of ICONIP 2013, the organizing committee is pleased to offer sufficient rooms at hotels listed on ICONIP 2013 website with discount rates. To take advantage of these discounts, participants are kindly advised to make an on-line hotel reservation via the ICONIP 2013 website.

TRANSPORTATION

International Travel

The major arrival points in Korea are the Incheon International Airport (Seoul), the Gimhae International Airport (Busan), and the Daegu International Airport (Daegu). For those who arrive at Incheon Airport, to take domestic airline or KTX (Korean train express) train is highly recommended. From Gimhae International Airport, you can also take KTX train as well as limousine buses heading to Daegu.

Incheon International Airport (Seoul)

✈ 57 countries 174 cities

Daegu International Airport (Daegu)

✈ 2 countries 5 cities
 Beijing, Shanghai, Qingdao, Shenyang, Bangkok

Gimhae International Airport (Busan)

✈ 11 countries 25 cities
 USA, Germany, Japan, China, Philippines, Vietnam, Russia, Thailand, Taiwan

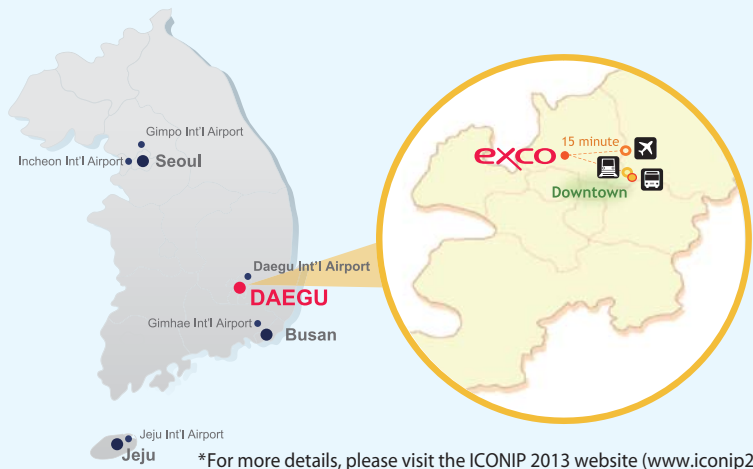
Domestic Transportation

From Incheon Int'l Airport (Seoul)

- ✈ Domestic Flight: 50 minute, 2 flights/day
- 🚆 KTX: 140 minute, every 30 minute
- 🚌 Limousine bus: 4 hours, 33 times/day

From Gimhae Int'l Airport (Busan)

- 🚌 Limousine bus: 70 minute, every 40 minute



*For more details, please visit the ICONIP 2013 website (www.iconip2013.org)

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