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enquiries@iconip2014.org

CALL FOR PAPERS

CONFERENCE SCOPE AND THEMES

The 21st International Conference on Neural Information Processing (ICONIP 2014), an annual conference of the Asia Pacific Neural Network Assembly (APNNA) will be held in the beautiful city of Kuching, Sarawak, Malaysia from 3 - 6 November 2014.

ICONIP 2014 will provide a high-level international forum for scientists, engineers, educators, and students to address new challenges, share solutions, and discuss future research directions in neural information processing and real-world applications. The scope of the conference includes, but is not limited to,

* Cognitive Science and Artificial Intelligence

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.

* Learning Theory, Algorithms, and Architectures

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.

* Computational Neuroscience and Brain Imaging

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

* 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 modelling, 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. 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 refereed by experts in the field 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 referees' comments and suggestions. The proceedings of ICONIP 2014 will be published by Springer in its series of Lecture Notes in Computer Science. Authors of selected papers will be invited to extend their work and to submit their manuscript for review and possible publication in any of the following journals/book volume:

- Neurocomputing
- Neural Computing and Applications (by Springer)
- Neural Processing Letters
- International Journal of Knowledge Engineering and Soft Data Paradigms (IJKESDP)
- International Journal of Advanced Intelligence Paradigms
- International Journal of Computational Intelligence Studies
- International Journal on Intelligent Decision Technologies (IDT)
- Numerical Algebra, Control, and Optimization
- Advances in Neural Network Optimisation and Simulations (book volume in "Advances in Mechanics and Mathematics" by Springer)

IMPORTANT DATES

Submission deadline for Special Session/Workshop proposals	4 April 2014	18 April 2014
Notification of acceptance (Special Session/Workshop proposals)	14 April 2014	25 April 2014
Submission deadline for regular and Special Session papers	2 May 2014	30 May 2014
Notification of acceptance		3 August 2014
Camera-ready final paper submission		10 August 2014
Early registration		10 August 2014
Conference		3 - 6 November 2014
Pre-Conference Workshop (Kuala Lumpur)		31 October 2014

KEYNOTE SPEAKER



[Prof. Dr. Shun-Inchi Amari](#)

PLENARY SPEAKERS



[Prof. Dr. Jürgen Schmidhuber](#)



[Prof. Dr. Jacek Zurada](#)

INVITED SPEAKERS



[Prof. Dr. Tan Kay Chen](#)



[Prof. Dr. Liu Derong](#)



[Prof. Dr. Zhi-Hua Zhou](#)



[Prof. Dr. Jun Wang](#)



[Prof. Dr. Akira Hirose](#)



[Prof. Dr. Soo-Young Lee](#)



[Prof. Dr. Nikholas Kasabov](#)

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SARAWAK



Welcome to the land of the hornbills! Sarawak is located on the island of Borneo, the third largest island in the world, north of the Equator. With its beautiful blue skies and tropical breezes you can bathe in the sandy beaches and palm-fringed state of Sarawak.



If adventure had a home, it would be the vast wilderness. Grand, green, awesome! Like no other place on earth. If adventure had a home, it would be filled with the friendliest people on earth. People of different races, religions and cultures. If adventure had a home, it would be here when one arrives as a guest and leaves as family. If adventure had a home, its home would be Sarawak. Come and explore our vast wild home of adventure. Sarawak, where adventure lives.

Most of the people of Sarawak are sedentary farmers who live in communal longhouses and practice swidden rice agriculture. This state has the most diverse ethnic groups with a very distinct culture, language and lifestyle. A variety of religion with 45 different languages and dialects runs this town. In

spite of these differences, the locals epitomise peace, harmony and unity.

