Summer School
Mon. June 25 - Fri., August 3, 2012

International Conference on Brain-Mind (ICBM)
Sat. July 14, 2012 - Sun. July 15, 2012
Michigan State University, East Lansing, Michigan USA
http://www.brain-mind-institute.org/

Collectively, the human race seems ready to unveil one of its last mysteries — how its brain-mind works at computational depth. The research community needs a large number of leaders who have sufficient knowledge in at least six disciplines conjunctively — Biology, Neuroscience, Psychology, Computer Science, Electrical Engineering, and Mathematics (6 disciplines). The Brain-Mind Institute (BMI) provides an integrated 6-discipline academic and research infrastructure for future leaders of brain-mind research. The BMI is a new kind of institute, not limited by boundaries of disciplines, organizations, and geographic locations.

The _subjects of interest_ include, but not limited to:

Genes: inheritance, evolution, species, environments evolution vs. development.

Cells: cell models, cell learning, cell signaling, tissues, morphogenesis, tissue.

Circuits: features, clustering, self-organization, brain areas, classification, regression.

Streams: pathways, intra-modal attention, vision, audition, touch, taste.

Brain ways: neural networks, brain-mind architecture, inter-modal, neural modulation (punishment/serotonin, reward/dopamine, novelty/Ach/NE, higher emotion).

Experiences/learning: training, learning, development, interaction, performance metrics.

Behaviors: actions, concept learning, abstraction, languages, decision, reasoning.

Societies/multi-agent: joint attention, swarm intelligence, group intelligence, laws.

Diseases: depression, ADD/ADHD, drug addiction, dyslexia, autism, schizophrenia, Alzheimer's disease, Parkinson's disease, vision loss, and hearing loss.

Applications: image analysis, computer vision, speech recognition, pattern recognition, robotics, artificial intelligence, instrumentation, and prosthetics.

Keynote talks include:

James L. McClelland, Stanford University
Stephen Grossberg, Boston University

INNS-WC2012
INNS-Winter Conference 2012
October 3-5, 2012, Bangkok, Thailand
http://inns.sit.kmutt.ac.th/wc2012/

The flagship conference of the International Neural Network Society (INNS) is the International Joint Conference on Neural Networks (IJCNN) that is jointly sponsored by INNS and IEEE Computational Intelligence Society. IJCNN traditionally features invited plenary talks by world-renowned speakers in the areas of neural network theory and applications, computational neuroscience, robotics, and distributed intelligence. In addition to regular technical sessions with oral and poster presentations, the conference program will include special sessions, competitions, tutorials and workshops on topics of current interest. Typically there are well over six hundred delegates in this annual event.

The board of governors of INNS decided in 2006 to establish a series of symposia or winter conferences devoted to new developments in neural networks. The first of the INNS Symposia Series was held in Auckland, New Zealand back on November 24-25, 2008 – http://www.aut.ac.nz/nnn08/. The theme was "Modeling the brain and the nervous system" and comprised of two symposia: 1) Development and Learning; and 2) Computational Neurogenetic Modelling. The second in the series was the INNS International Education Symposium on Neural Networks (INNS-IESNN) held in Lima, Peru on January 25-27, 2011 – http://eventos.spc.org.pe/inns-iesnn/index.html. The third Symposia Series will cover a much broader context of "Natural and Machine Intelligence".

INNS-WC general track: Trends in Natural and Machine Intelligence: Neural network theory & models; Computational neuroscience; Cognitive models; Brain-machine interface; Collective intelligence; etc.

INNS Symposium on Nature Inspired Creativity (SoNIC2012): Application of nature inspired computing in creative industries; Art and cognition; Generative art; Aesthetic evaluation; etc.

INNS Symposium on Vision and Image Processing (SoVIP2012): Low-level image processing; 3D sensing & object modeling; Tracking and surveillance; Human motion analysis; Robot intelligence; etc.

INNS Symposium on Data Analytics and Competitions (SoDAC2012): Business intelligence; Air quality and environmental issues; Social networks and analytics; Neuro-informatics; Data competitions; etc.