

The 2nd Workshop on Bio-inspired Energy-Efficient Information Systems

Sanjo Conference Hall, The University of Tokyo, March 2, 2016

Workshop Program : 13:00-18:00

Opening remark

Social Cooperate Program Speech

13:00-13:05 Mamoru Mitsuishi (Dean, Graduate School of Engineering, The University of Tokyo)

13:05-13:10 Takeshi Fukuda (Director, IBM Research – Tokyo)

Guest Speech

13:10-13:20 Toshiya Watanabe (Director, Division of University Corporate Relations, The University of Tokyo)

Plenary speakers

13:20-14:00 Heike Riel (Director, Physical Science, S&T, IBM Research)
"Towards Next Generation of Computing"

14:00-14:40 Kazuyuki Aihara (Professor, Inst. of Industrial Science, The University of Tokyo)
"Bio-inspired Computation by the Uncomputable: Examples of Chaotic and Quantum Neural Networks"

Invited speakers

14:40-15:05 Akira Hirose
(Professor, Dept. of Electrical Eng. and Information Systems, The University of Tokyo)
"Quantum and classical wave processing based on complex-valued neural networks"

15:05-15:30 Spike Narayan (Director, S&T, IBM Research - Almaden)
"Center for Machine Intelligence ? Enabling real time learning"

15:30-15:45 Break

15:45-16:10 Tadashi Shibata
(Professor Emeritus, Dept. of Electrical Eng. and Information Systems, The University of Tokyo)
"A Nano-Device-Based Brain System Mimicking the Processing in the Mind"

16:10-16:35 Yasuo Kuniyoshi (Professor, Dept. of Mechano-Informatics, The University of Tokyo)
"Simulating Embodied Human Brain Development"

16:35-17:00 Takayuki Osogami (Research Staff Member, IBM Research - Tokyo)
"Dynamic Boltzmann Machine"

Joint Study Update

17:00-17:20 Gouhei Tanaka
(Associate Professor, Institute for Innovation in International Eng. Education, The Univ. of Tokyo)
"Neural Associative Memory with Sparse Modular Structures"

17:20-17:40 Toshiyuki Yamane (Staff Researcher, IBM Research – Tokyo)
"Wave-based reservoir computing by coupled oscillators"

17:40-18:00 Daiju Nakano (Research Staff Member, IBM Research – Tokyo)
"Approaches for bio-inspired, energy-efficient information processing"

Closing remark

Informal discussion: 18:30-20:30

Whoever wants to come will be welcomed.

B1 Dining room at Sanjo Conference Hall, Participation fee : ¥1,000

Announcement

Please use the microphone on your desk for questions. Please turn it on before you speak, and do not forget to turn it off when you finish. Please do not remove the microphone.

Eating in the conference room is prohibited.