



MonPM1-3 Whole Brain Architecture: Toward a Human Like General Purpose Artificial Intelligence 1

Chair: Takashi Omori, Hiroshi Yamakawa

Room: International Conference Hall III

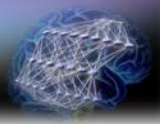
13:20 - 13:40 Whole brain architecture approach is a feasible way toward an Artificial General Intelligence
Hiroshi Yamakawa¹, Masahiko Osawa², Yutaka Matsuo³
¹Dwango ²Keio University ³The University of Tokyo

13:40 - 14:00 Learning Visually Guided Risk-Aware Reaching on a Robot Controlled by a GPU Spiking Neural Network
Terence Sanger¹
¹USC

14:00 - 14:20 Regularization Methods for the Restricted Bayesian Network BESOM
Yuuji Ichisugi¹, Takashi Sano¹
¹AIST

14:20 - 14:40 Representation of Relations by Planes in Neural Network Language Model
Takuma Ebisu¹, Ryutaro Ichise²
¹SOKENDAI ²National Institute of Informatics

14:40 - 15:00 Modeling of emotion system as a value calculation system
Takashi Omori¹, Masahiro Miyata¹
¹Tamagawa University



MonPM2-3 Whole Brain Architecture: Toward a Human Like General Purpose Artificial Intelligence 2

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| 15:20 | - | 15:40 | The Whole Brain Architecture Initiative
Naoya Arakawa ¹ , Hiroshi Yamakawa ²
¹ The Whole Brain Architecture Initiative ² Dwango |
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| 15:40 | - | 16:00 | Neural Network for Quantum Brain Dynamics: 4D $CP^1 + U(1)$ Gauge
Theory on Lattice and its Phase Structure
Shinya Sakane ¹ , Tetsuo Matsui ¹
¹ Kindai University |
| <hr/> | | | |
| 16:00 | - | 16:20 | BriCA: A Modular Software Platform for Whole Brain Architecture
Kotone Itaya ¹ , Koichi Takahashi ² , Masayoshi Nakamura ³ , Moriyoshi
Koizumi ⁴ , Naoya Arakawa ⁵ , Masaru Tomita ¹ , Hiroshi Yamakawa ³
¹ Keio University ² RIKEN QBiC ³ DWANGO Co. ⁴ Open Collector
Inc. ⁵ The Whole Brain Architecture Initiative |
| <hr/> | | | |
| 16:20 | - | 16:40 | An Implementation of Working Memory Using Stacked Half Restricted
Boltzmann Machine: Toward to Restricted Boltzmann Machine-Based
Cognitive Architecture
Masahiko Osawa ¹ , Hiroshi Yamakawa ¹ , Michita Imai ¹
¹ Keio University / Dwango AI Laboratory |
| <hr/> | | | |
| 16:40 | - | 17:00 | A Game-Engine-Based Learning Environment Framework for Artificial
General Intelligence - Toward Democratic AGI -
Masayoshi Nakamura ¹ , Hiroshi Yamakawa ¹
¹ DWANGO Co. |
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