

ICDL-05 Program

Tuesday, July 19

9:30	Workshop & Tutorial Room C&D
12:00	Lunch
13:00	Workshop & Tutorial Room C&D
15:00	Break
15:40	Robocup Symposium ICDL Joint Session Talk 1 Pat Langley
16:30	Break
16:40	Robocup Symposium ICDL Joint Session Talk 2 Giulio Sandini
17:30	Break
18:00	Welcome Reception
20:00	

Wednesday, July 20

9:00	Invited Talk 1 Claes von Hofsten
9:50	Talk 1
10:15	Talk 2
10:40	Talk 3
11:05	Break
11:15	Talk 4
11:40	Talk 5
12:05	Lunch
13:30	Invited Talk 2 Yasuo Kuniyoshi
14:20	Talk 6
14:45	Talk 7
15:10	Break
15:20	Talk 8
15:45	Talk 9
16:10	Talk 10
16:35	Talk 11
17:00	Break
17:10	Poster Session
19:10	

Thursday, July 21

9:00	Invited Talk 3 Toshio Inui
9:50	Talk 12
10:15	Talk 13
10:40	Talk 14
11:05	Break
11:15	Talk 15
11:40	Talk 16
12:05	Lunch
13:30	Invited Talk 4 Joseph J. Campos
14:20	Break
14:30	Talk 17
14:55	Talk 18
15:20	Talk 19
15:45	Talk 20
16:10	Break
16:20	Panel Discussion
17:20	

Program

Oral Session [International Conference Hall]

Tuesday, July 19, 2005

Robocup Symposium (ICDL Joint Session) Talk 1 (Tuesday, July 19, 15:40-16:30)

An Adaptive Architecture for Physical Agents

Pat Langley

Robocup Symposium (ICDL Joint Session) Talk 2 (Tuesday, July 19, 16:40-17:30)

Developmental Robotics and Robot Development

Giulio Sandini

Wednesday, July 20, 2005

Invited Talk 1 (Wednesday, July 20, 9:00-9:50)

An Action Approach to Motor Development

Claes von Hofsten

Talk 1 (Wednesday, July 20, 9:50-10:15)

From Unknown Sensors and Actuators to Visually Guided Movement

Lars Olsson, Chrystopher L. Nehaniv, and Daniel Polani

Talk 2 (Wednesday, July 20, 10:15-10:40)

Timing-Based Model of Body Schema Adaptation and its Role in Perception and Tool Use: A Robot Case Study

Cota Nabeshima, Max Lungarella, and Yasuo Kuniyoshi

Talk 3 (Wednesday, July 20, 10:40-11:05)

Spontaneous Facial Mimicry in Response to Dynamic Facial Expressions

Wataru Sato and Sakiko Yoshikawa

Talk 4 (Wednesday, July 20, 11:15-11:40)

An Infomax Controller for Real-Time Detection of Social Contingency

Javier R. Movellan

Talk 5 (Wednesday, July 20, 11:40-12:05)

Information Self-Structuring: Key Principle for Learning and Development

Max Lungarella and Olaf Sporns

Invited Talk 2 (Wednesday, July 20, 13:30-14:20)

Emergence and Development of Humanoid Embodied Cognition

Yasuo Kuniyoshi

Talk 6 (Wednesday, July 20, 14:20-14:45)

Fear-like Response Induced by Intentional Gap between Neural and Body-Environment Dynamics

Shogo Yonekura, Max Lungarella, and Yasuo Kuniyoshi

Talk 7 (Wednesday, July 20, 14:45-15:10)

How to Behave in the Social World: Behavioral Analysis and Modelling for Development of Cognitive Processes

Satoru Ishikawa and Takashi Omori

Talk 8 (Wednesday, July 20, 15:20-15:45)

Interneurons: Their Cognitive Roles - A Perspective from Dynamical Systems View

Hiroshi Fujii and Ichiro Tsuda

Talk 9 (Wednesday, July 20, 15:45-16:10)

Dynamic Hierarchical Firing within a Single Layered Network: A Model of the PFC

Masataka Watanabe and Kazuyuki Aihara

Talk 10 (Wednesday, July 20, 16:10-16:35)

Cooperative Behavior of Agents That Model the Other and the Self in Noisy Iterated Prisoners' Dilemma Simulation

Takaki Makino and Kazuyuki Aihara

Talk 11 (Wednesday, July 20, 16:35-17:00)

Impaired Visual Working Memory Capacity in case of Motion Direction and Color-Shape Feature Binding

Masahiro Kawasaki, Masataka Watanabe, and Kazuyuki Aihara

Poster Session (Wednesday, July 20, 17:10-19:10)

Thursday, July 21, 2005

Invited Talk 3 (Thursday, July 21, 9:00-9:50)

Brain-Body-Environment Interactions in Cognition

Toshio Inui

Talk 12 (Thursday, July 21, 9:50-10:15)

An Articulatory Model with Developmental Constraints: Some Evidence from Child Speech Data

Masanori Ijiri, Toshio Inui, Shigeaki Amano, and Tadahisa Kondo

Talk 13 (Thursday, July 21, 10:15-10:40)

Dynamic Evolution of Language Games between Two Autonomous Robots

Jean-Christophe Baillie and Matthieu Nottale

Talk 14 (Thursday, July 21, 10:40-11:05)

Lexicon Acquisition based on Behavior Learning

Shinya Takamuku, Yasutake Takahashi, and Minoru Asada

Talk 15 (Thursday, July 21, 11:15-11:40)

The RUBI/QRIO Project: Origins, Principles, and First Steps

Javier R. Movellan, Fumihide Tanaka, Bret Fortenberry, and Kazuki Aisaka

Talk 16 (Thursday, July 21, 11:40-12:05)

Reinforcement Learning with Multiple Heterogeneous Modules: A Framework for Developmental Robot Learning

Eiji Uchibe and Kenji Doya

Invited Talk 4 (Thursday, July 21, 13:00-14:20)

The Importance of Locomotion for Psychological Development in Infancy

Joseph J. Campos

Talk 17 (Thursday, July 21, 14:30-14:55)

Infants' Preference for Infants and Adults

Wakako Sanefuji, Hidehiro Ohgami, and Kazuhide Hashiya

Talk 18 (Thursday, July 21, 14:55-15:20)

Motor Interference between Humans and Humanoid Robots: Effect of Biological and Artificial Motion

Thierry Chaminade, David W. Franklin, Erhan Oztop, and Gordon Cheng

Talk 19 (Thursday, July 21, 15:20-15:45)

Does Pointing Comprehension Disturb Controlling Actions? :Evidence from 2-year-old Children

Yusuke Moriguchi and Shoji Itakura

Talk 20 (Thursday, July 21, 15:45-16:10)

Does Gaze Reveal the Human Likeness of an Android?

Takashi Minato, Michihiro Shimada, Shoji Itakura, Kang Lee, and Hiroshi Ishiguro

Panel Discussion (Thursday, July 21, 16:20-17:20)

International Collaboration of Study on Development and Learning

Coordinator: Minoru Asada (Osaka University, Japan)

Panelist: Joseph J. Campos (University of California, USA)

Claes von Hofsten (Uppsala University, Sweden)

Giulio Sandini (University of Genova, Italy)

Ichiro Uchiyama (Doshisha University, Japan)

Poster Session (Wednesday, July 20, 17:10-19:10) [International Conference Hall]

- | | |
|----------|---|
| Poster 1 | Color Tone Perception and Naming: Development in Acquisition of Color Modifiers
Dishna R. Wanasinghe, Charith N.W. Giragama, and Nadia Bianchi-Berthouze |
| Poster 2 | Cognitive Substrates: What They Are and What They Learn
Alexander I. Kovács and Haruki Ueno |
| Poster 3 | Self-Development of Motor Abilities Resulting from the Growth of a Neural Network Reinforced by Pleasure and Tensions
Juan Liu and Andrzej Buller |
| Poster 4 | Visio-Tactile Binding through Double-Touching by a Robot with an Anthropomorphic Tactile Sensor
Yuichiro Yoshikawa, Mamoru Yoshimura, Koh Hosoda, and Minoru Asada |

- Poster 5 **Self-Other Motion Equivalence Learning for Head Movement Imitation**
Yukie Nagai
- Poster 6 **Evolutionary Robotics: Incremental Learning of Sequential Behavior**
Nicolas Bredeche and Louis Hugues
- Poster 7 **Mapping the Space of Skills: An Approach for Comparing Embodied Sensorimotor Organizations**
Frederic Kaplan and Verena V. Hafner
- Poster 8 **Real-Time Multi-View Face Tracking for Human-Robot Interaction**
Kwang Ho An, Dong Hyun Yoo, Sung Uk Jung, and Myung Jin Chung
- Poster 9 **Six-month-old Infants' Expectations for Interactive-Humanoid Robots**
Akiko Arita, Kazuo Hiraki, Takayuki Kanda, and Hiroshi Ishiguro
- Poster 10 **Plans for Developing Real-Time Dance Interaction between QRIO and Toddlers in a Classroom Environment**
Fumihide Tanaka, Bret Fortenberry, Kazuki Aisaka, and Javier R. Movellan
- Poster 11 **Imitation Faculty based on a Simple Visuo-Motor Mapping towards Interaction Rule Learning with a Human Partner**
Masaki Ogino, Hideki Toichi, Minoru Asada, and Yuichiro Yoshikawa
- Poster 12 **Familiar Behaviors Evaluation for a Robotic Interface of Practicality and Familiarity**
Daisuke Yamamoto, Miwako Doi, Nobuto Matsuhira, Hirotada Ueda, and Masatsugu Kidode
- Poster 13 **Longitudinal Observations of Structural Changes in the Mother-Infant Interaction: A New Perspectives based on Infants' Locomotion Development**
Atsuhiko Funabashi
- Poster 14 **Online Injection of Teacher's Abstract Concepts into a Real-Time Developmental Robot with Autonomous Navigation as Example**
Shuqing Zeng, Nan Zhang, and Juyang Weng
- Poster 15 **Towards Robot Soccer Team Behaviours through Approximate Simulation**
Stephen R. Young and Stephan K. Chalup
- Poster 16 **How can Prosody Help to Learn Actions?**
Britta Wrede, Jannik Fritsch, and Katharina Rohlfing
- Poster 17 **It's a Child's Game: Investigating Cognitive Development with Playing Robots**
Birger Johansson and Christian Balkenius
- Poster 18 **Young Infants' Sensitivity to Social Contingency from Mother and Stranger: Developmental Changes**
Mako Okanda and Shoji Itakura
- Poster 19 **Distinguishing Intentional Actions from Accidental Actions**
Kousuke Harui, Natsuki Oka, and Yasushi Yamada
- Poster 20 **Emotional Elicitation by Dynamic Facial Expressions**

Wataru Sato and Sakiko Yoshikawa

- Poster 21 **Competition between Spatial and Temporal Factors in Simple Apparent Motion is Modulated by Laterality**
Kazuhiro Sakamoto, Toru Onizawa, and Masafumi Yano
- Poster 22 **Studies on the Mode of Tangential Migration of Developing GABAergic Neurons, with Special Reference to Their Birthdate**
Satoshi Tada and Fujio Murakami
- Poster 23 **The Developmental Change of Infants' Gaze Shift**
Misa Kuroki
- Poster 24 **Memory for Faces in Infants: A Comparison to the Memory for Objects**
Reiko Morimoto and Kazuhide Hashiya
- Poster 25 **Inhibition in Cognitive Development: Contextual Impairments in Autism**
Petra Björne, Birger Johansson, and Christian Balkenius
- Poster 26 **Reinforcement Learning of Informative Attention Patterns for Object Recognition**
Lucas Paletta, Gerald Fritz, and Christin Seifert
- Poster 27 **Motion-Triggered Human-Robot Synchronization for Autonomous Acquisition of Joint Attention**
Hidenobu Sumioka, Koh Hosoda, Yuichiro Yoshikawa, and Minoru Asada
- Poster 28 **A Computational Model which Learns to Selectively Attend in Category Learning**
Lingyun Zhang and Garrison W. Cottrell
- Poster 29 **Prototype-Specific Learning for Children's Vocabulary**
Shohei Hidaka and Jun Saiki
- Poster 30 **Learning the Correspondence between Continuous Speeches and Motions**
Natsuki Oka, Arata Nakafushiki, and Yoshiaki Itoh
- Poster 31 **Statistical Characteristics of Velocity of Movements of Limbs in Young Infants during the Conjugate Reinforcement Mobile Task**
Ryoya Saji, Hama Watanabe, and Gentaro Taga
- Poster 32 **Transient Synchrony and Dynamical Representation of Behavioral Goals of the Prefrontal Cortex**
Kazuhiro Sakamoto, Hajime Mushiake, Naohiro Saito, and Jun Tanji
- Poster 33 **Kernel Isomap on Noisy Manifold**
Heeyoul Choi and Seungjin Choi