

Poster Session I (20 posters)

5 Powers, Robert; Rakison, David; Plaut, David, Carnegie Mellon University, Learning about Actions in Infancy without a Rationality Principle

6 Taniguchi, Tadahiro; Nakashima, Ryo; Nagasaka, Shogo, Ritsumeikan University, Direct Word Discovery from Speech Signals Based on Hierarchical Dirichlet Process-Hidden Language Model and Deep Sparse Autoencoder

7 Strack, Daniel C. The University of Kitakyushu, Directionality in Figurative Language Interpretation: Prior Activation Determines Details of Feature Attribution in Metaphor Processing

10 Otworowska, Maria; Zaadnoordijk, Lorijn; de Wolff, Erwin; Kwisthout, Johan; van Rooij, Iris Radboud University Nijmegen, Donders Institute for Brain, Cognition and Behaviour, Causal Learning in the Crib: A Predictive Processing Formalization and Babybot Simulation

11 Zaadnoordijk, Lorijn; Otworowska, Maria; Kwisthout, Johan; Hunnius, Sabine; van Rooij, Iris Radboud University Nijmegen, Donders Institute for Brain, Cognition, & Behaviour, Nijmegen, The Mobile-Paradigm As Measure of Infants' Sense of Agency? Insights from Babybot Simulations

14 Huang, Qiong; Uchibe, Eiji; Doya, Kenji, Okinawa Institute of Science and Technology Graduate University, Emergence of Communication among Reinforcement Learning Agents under Coordination Environment

28 Rat-Fischer, Lauriane; Plunkett, Kim; von Bayern, Auguste; Kacelnik, Alex, University of Oxford, Development of Physical Problem-Solving Competences in Human Infants and Corvids

30 Bunlon, Frédérique; Gazeau, Jean Pierre; Colloud, Floren; Bouquet, Cédric, ETIS/CNRS/ENSEA University of Cergy-Pontoise Action Co-Representation, During Task Sharing and Sensorimotor Experience: A Comparison Study between Human-Human and Human-Robot Interaction

33 Sheya, Adam, University of Connecticut, The Emergence of What Where Coordination in Human Infants

39 Hinaut, Xavier; Twiefel, Johannes; Wermter, Stefan, INRIA, Recurrent Neural Network for Syntax Learning with Flexible Predicates for Robotic Architectures

41 Le Goff, Leni Kenneth; Le Fur, Pierre-Henri; Doncieux, Stéphane, UPMC, Exploration of unknown dynamic environments : a visual saliency-based babbling approach

42 Salgado, Rodrigo; Prieto, Abraham; Bellas, Francisco; Duro, Richard, University of Coruna, Improving Extrinsically Motivated Developmental Robots through Intrinsic Motivations

48 Guertel, Idai; Schillaci, Guido; Hafner, Verena Vanessa, TU, Berlin, Using Proprioceptive Information for the Development of Robot Body Representations

52 Guedjou, Hakim; Boucenna, Sofiane; Chetouani, Mohamed, UPMC Univ, Posture Recognition Analysis During Human-Robot Imitation Learning

54 Stapel, Janny; Rosander, Kerstin; von Hofsten, Claes, Uppsala University, Infants' Use of Multisensory Information for Postural Control

66 A. Hameed, Ibrahim, NTNU i Ålesund, Using Natural Language Processing for Designing Socially Intelligent Robots

69 Murakami, Max; Bolhuis, Jantina; Kolling, Thorsten; Knopf, Monika; Triesch, Jochen, Frankfurt Institute for Advanced Studies, Look and Learn: A Model of Gaze-Contingent Learning

70 Braud, Raphaël; Pitti, Alexandre; Gaussier, Philippe, CNRS UMR 8051, ENSEA, Cergy-Pontoise University, Dynamic Sensorimotor Model for open-ended acquisition of tool-use

71 Sheya, Adam, University of Connecticut, Development of Abstract Knowledge Through Action

74 Takabuchi, Kenta; Iwahashi, Naoto; Kunishima, Takeo Okayama, Prefectural University, A Language Acquisition Method Based on Statistical Machine Translation for Application to Robots

Poster Session II (21 posters)

67 Gepperth, Alexander R.T.; Lefort, Mathieu Thomas Sylvain ENSTA ParisTech Learning to Be Attractive: Probabilistic Computation with Dynamic Attractor Networks

68 Lewkowicz, Daniel; Giagkos, Alexandros; Shaw, Patricia; Kumar, Suresh; Lee, Mark; Shen, Qiang Aberystwyth University Towards Learning Strategies and Exploration Patterns for Feature Perception

15 Hwang, Jungsik; Jung, Minju; Kim, Jinhyung; Tani, Jun Professor, Department of Electrical Engineering, KAIST A Deep Learning Approach for Seamless Integration of Cognitive Skills for Humanoid Robots

8 Barnaud, Marie-Lou; Schwartz, Jean-Luc; Diard, Julien; Bessière, Pierre GIPSA-LAB Sensorimotor Learning in a Bayesian Computational Model of Speech Communication

51 Matricon, Adrien; Filliat, David; Oudeyer, Pierre-Yves Ensta ParisTech, Université Paris-Saclay An Iterative Algorithm for Forward-Parameterized Skill Discovery

62 Pico Villalpando, Antonio; Schillaci, Guido; Hafner, Verena Vanessa; Lara, Bruno Humboldt Universität zu Berlin How Do I Sound Like? Forward Models for Robot Ego-Noise Prediction

46 Bechtle, Sarah; Schillaci, Guido; Hafner, Verena Vanessa Bernstein Center for Computational Neuroscience On the Sense of Agency and of Object Permanence in Robots

31 Gay, Simon L.; Mille, Alain; Cordier, Amélie Université Lyon 1, LIRIS Autonomous Affordance Construction without Planning for Environment-Agnostic Agents

19 Stramandinoli, Francesca; Tikhanoff, Vadim; Pattacini, Ugo; Nori, Francesco Istituto Italiano di Tecnologia Grounding Speech Utterances in Robotics Affordances: An Embodied Statistical Language Model

12 Wieser, Erhard; Cheng, Gordon Technical University Munich Progressive Learning of Sensory-Motor Maps through Spatiotemporal Predictors

29 Prucksakorn, Tanapol; Jeong, Sungmoon; Triesch, Jochen; LEE, Hosun; Chong, Nak Young Japan Advanced Institute of Science and Technology Self-Calibrating Active Depth Perception Via Motion Parallax

9 Kumar, Suresh; Shaw, Patricia; Lewkowicz, Daniel; Giagkos, Alexandros; Shen, Qiang; Lee, Mark Aberystwyth University Developing Object Understanding through Schema Generalisation

2 Zeno, Peter University of Bridgeport Using an FPGA to Emulate Grid Cell Spatial Cognition in a Mobile Robot

22 Pirim, Patrick BVS-Tech Bio-Inspired Statistical Perceptual Learning by Dynamic Attractor and Associative Memory, Integrated in a Silicon Chip

76 Mahzoon, Hamed; Yoshikawa, Yuichiro; Ishiguro, Hiroshi Osaka University Developmental Robot with Ostensive Cue Sensitive Learning for Real-World Interaction Based on Local Contingency Evaluation

64 Wong, Jay Ming; Grupen, Rod University of Massachusetts Amherst Intrinsically Motivated Multimodal Structure Learning

43 Okajima, Shotaro; Hasegawa, Yasuhisa; Shimoda, Shingo Nagoya University Acquisition of Adaptive Behavior of the Robot through Bow-Tie Structure

65 Alexa Romberg, Yayun Zhang, Benjamin Newman, Jochen Triesch, Chen Yu, University of Maryland, Indiana University-Bloomington, Frankfurt Institute for Advanced Studies. Global and Local Statistical Regularities Control Visual Attention to Object Sequences

50 Vasanth, Sarathy; Matthias, Scheutz Tufts University. Beyond Grasping-Perceiving Affordances Across Various Stages of Cognitive Development