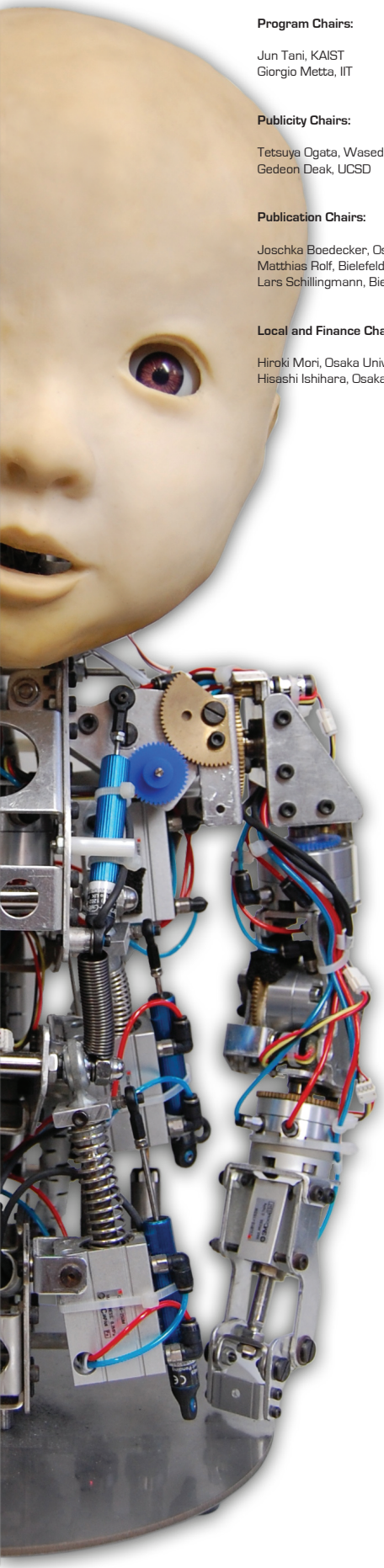
IEEE

IEEE Computational Intelligence Society



IEEE ICDL - EPIROB 2013

Osaka City Central Public Hall,
Osaka, Japan
August 18-22, 2013

The Third Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics

The past decade has seen the emergence of a new scientific field that studies how intelligent biological and artificial systems develop sensorimotor, cognitive and social abilities, over extended periods of time, through dynamic interactions with their physical and social environments. This field lies at the intersection of a number of scientific and engineering disciplines including Neuroscience, Developmental Psychology, Developmental Linguistics, Cognitive Science, Computational Neuroscience, Artificial Intelligence, Machine Learning, and Robotics. Various terms have been associated with this new field such as Autonomous Mental Development, Epigenetic Robotics, Developmental Robotics, etc., and several scientific meetings have been established. The two most prominent conference series of this field, the International Conference on Development and Learning (ICDL) and the International Conference on Epigenetic Robotics (EpiRob), are now joining forces and invite submissions for a joint meeting in 2013, to explore and extend the interdisciplinary boundaries of this field.

Call for submissions

We invite submissions for this exciting window into the future of developmental sciences. Submissions which establish novel links between brain, behavior and computation are particularly encouraged.

Topics of interest include – but are not limited to:

- Development of perceptual, motor, cognitive, emotional, social, and communicational skills in biological systems and robots
- General principles of development and learning
- Neural and behavioral plasticity
- Grounding of knowledge and development of representations
- Biologically inspired architectures for cognitive development
- Models of emotionally driven behavior
- Mechanisms of intrinsic motivation, exploration, and play
- Embodied cognition: foundations and applications
- Social development in humans and robots
- Use of robots in applied settings such as autism therapy
- Epistemological approaches to Epigenetic / Developmental Robotics

Call for tutorials

We invite experts in different areas to organize a tutorial, which will be held on the first day of the conference. Participants in tutorials are asked to register for the main conference as well. Tutorials are meant to provide insights into specific topics as well as overviews that will inform the interdisciplinary audience about the state-of-the-art in child development, neuroscience, robotics, or any of the other disciplines represented at the conference.

Call for special sessions

A special session will be an opportunity to present a topic cumulatively. Special session organizers are invited to submit (1) a summary (250 words) describing the topic, purpose and target audience of the session as well as (2) abstracts of papers (each 250 words) that will constitute the group of presentations. It is suggested that a special session includes three oral presentations to allow for sufficient presentation and discussion time. A discussant (also from other discipline) may be added to the special session.

Important dates

Submission Deadline: March 10, 2013
Notification Due: April 25, 2013
Final Version Due: May 31, 2013
Conference: August 18-22, 2013

http://www.icdl-epirob.org/