ICDL 2006 International Conference on Development and Learning - Dynamics of Development and Learning -

http://www.icdl06.org

Indiana University Bloomington, May 31- June 3, 2006

Call for Papers Paper Submission Deadline: Feb. 6, 2006 Call for Invited Sessions Proposals Proposal Submission Deadline: Dec. 1, 2005

Recent years have seen a convergence of research in artificial intelligence, developmental psychology, cognitive science, neuroscience and robotics, aimed at identifying common computational principles of development and learning in artificial and natural systems. The theme of this year's conference centers on development as a process of dynamic change that occurs within a complex and embodied system. The dynamics of development extend across multiple levels, from neural circuits, to changes in body morphology, sensors, movement, behavior, and inter-personal and social patterns. The goal of the conference is to present state-of-the-art research on autonomous development in humans, animals and robots, and to continue to identify new interdisciplinary research directions for the future of the field.

The 5th International Conference on Development and Learning 2006 (ICDL06) will be held on the campus of Indiana University Bloomington, May 31- June 3, 2006. The conference is organized with the technical co-sponsorship of the IEEE Computational Intelligence Society. The conference will feature plenary talks by invited keynote speakers, invited sessions (workshops) organized around a central topic, a panel discussion and poster sessions.

Paper submissions (for details regarding format and submission/review process see our website at <u>http://www.icdl06.org</u>) are invited in these areas:

- General Principles of Development and Learning in Humans and Robots
- Neural, Behavioral and Computational Plasticity
- Embodied Cognition: Foundations and Applications
- Social Development in Humans and Robots
- Language Development and Learning
- Dynamic Systems Approaches
- Emergence of Structures through Development
- Development of Perceptual and Motor Systems
- Models of Developmental Disorders

Authors may specify preferences for oral or poster presentations. All submissions will be peer-reviewed and accepted papers will be published in a conference proceedings volume. Selected conference presenters will be invited to update and expand their papers for publication in a special issue on "Dynamics of Development and Learning" of the journal Adaptive Behavior (<u>http://adb.sagepub.com/</u>).

ICDL precedes the conference "Artificial Life X", June 3-7, 2006, also held on the campus of Indiana University Bloomington (<u>http://alifex.org</u>). ICDL and ALIFE will share one day of overlapping workshops and tutorials on June 3.

Organizing Committee:

Linda Smith (Chair), Olaf Sporns, Chen Yu, Mike Gasser, Cynthia Breazeal, Gideon Deak, John Weng.