

Special Session: Call for Papers



Understanding and Imitating Nature:

Analysis, interpretation, rendering and inspiration of biological forms

Associated with ISVC 2006: <http://www.isvc.net/>

This special session is the first in a series of scientific and technical meetings concerned with the analysis and understanding of complex biological forms, their natural development, the modelling of their underlying processes and the rendering of these forms. Of great interest to the organisers is the analysis of biological forms on Earth and in micro-gravity conditions, the learning of generative models of biological form development, and the inspiration given by biological forms for the design of robotics systems.

We encourage paper submissions in the following areas:

- 3D imaging and modeling of plant growth on Earth and in microgravity
- Remote sensing using plant sentinels
- Recognition and quantification of features on biological images using automated image analysis techniques
- Modeling and rendering of biological morphologies, structures and forms
- Use of image processing for information extraction from biological images
- Computational analysis of the iterative and inherently fractal nature of biological morphology
- Analysis of biological images for understanding of morphology, structure and form
- Robotics inspired by biological forms

Submission details

All papers for the special session must be submitted in electronic format following the guidelines at URL: <http://www.isvc.net/>. The best papers will be selected for inclusion in a special issue of the International Journal of Knowledge-Based & Intelligent Engineering Systems (<http://www.kesinternational.org/journal/>). Please contact Paolo Remagnino at p.remagnino@kingston.ac.uk if you require any further information.

Important dates

Submission of papers:	June 19, 2006
Notification of acceptance:	July 31, 2006
Final papers to be received by:	August 14, 2006

Session Chairs

Paolo Remagnino, DIRC, Kingston University

Richard Boyle, BioVIS Technology Center, AMES Research, NASA, USA

Paul Wilkin, The Royal Botanic Gardens, Kew, UK

Jonathan Clark, Dept. of Computing, University of Surrey, UK

Sarah Barman, Digital imaging Research Centre, Kingston University, UK