

- In conjunction with the 2011 AISB (Society for the Study of Artificial Intelligence and Simulation of Behaviour) Convention -

# The 3rd AISB Symposium on Computing and Philosophy

**Date:** 7 April 2011

**Location:** University of York, UK

## Overview:

As a subject for philosophical investigation computing has a long history (including the work of such figures as Leibniz and Turing). With the rapid technological progress of electronic computing since the mid-20th century we have seen the emergence of much deeper and broader interactions between computing and philosophy, although the scope, and need, for such interactions has not yet been widely recognised. For example, computing is contributing to classical philosophical topics such as the nature of mind, intelligence, agency, the varieties of logic, and how representation 'works'. At the same time the phenomenon of computing itself calls out for sustained philosophical attention to new problems such as the nature of software, the nature of the 'science' of computing as a discipline, the relationship between personal worlds and virtual worlds, and the significance of computer-based communications for personal identity. Indeed, the (by no means exhaustive list) of topics noted below demonstrate this. Both philosophy and computing stand to benefit from this continuing dialogue, particularly where it leads to investigation and creative responses to traditional problems in each subject. In the case of areas such as cognitive science and ambient intelligence, for instance, the pace of contemporary technological innovation requires immediate philosophical analysis, if it is to take account of important broader issues.

The purpose of the symposium is to further strengthen communication between these disciplines, thereby to advance the philosophical study of computing in general in relation to a number of key issues. These include traditional philosophical problems and the philosophical issues surrounding computational modelling. We therefore welcome papers exploring any of these issues. Papers that engage with cognitive science are particularly encouraged.

One example of a central area of development in which philosophical perspectives can make an important contribution pertains to issues arising from current research in neuroimaging, particularly in relation to interpretative accounts of data. A further example is the need to comprehend and engage with ethical issues arising from emerging computational technologies such as ambient intelligence or nanotechnology. Interest also continues to grow in the convergence of themes from Constructivism, Enactivism, Dynamic Systems Theory and Second Order Cybernetics. The organisers are also keen to receive contributions in these areas.

## Suggested topics include, but are not limited to, philosophical issues surrounding:

- Cognitive science;
- Artificial intelligence, The Turing test, machine understanding.
- Artificial life;
- Computational biology;
- Simulation of behaviour and agency;
- Ambient intelligence;
- Biosemiotics;
- Constructivism;
- Second order cybernetics;
- Enactivism and sensorimotor theories of perception;
- Information and computer ethics;
- Nanotechnology ethics;
- Computer-mediated communication;
- Metaphysics (emergence, formal ontology, network structures, etc.);
- Philosophy of information / technology;
- Robotics;
- Computer-based modelling
- Varieties of logic, formal and informal
- Foundations of computing
- Virtual reality, Virtual identity.

## Submission and Publication Details:

Submitted contributions should be sent by electronic mail to Dr Yasemin J. Erden ([erdenyj@smuc.ac.uk](mailto:erdenyj@smuc.ac.uk)).  
All articles should be sent electronically as PDF files to this address.  
Text editor templates from a previous convention can be found at <http://www.aisb.org.uk/convention/aisb08/download.html>

We request that submitted papers are limited to eight pages.

Each paper will receive at least two reviews.

Selected papers will be published in the general proceedings of the AISB Convention, with the proviso that at least ONE author attends the symposium in order to present the paper and participate in general symposium activities.

### **Important Dates:**

Submission deadline: 31 January 2011

Notification of acceptance: 28 February 2011

Camera ready copy due: TBA

Convention: 7 April 2011

### **Additional Information:**

In previous years there have been awards for the best student paper, and limited student bursarys. These details will be circulated as and when they become available.

### **Organisers:**

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### **Symposium website:**

<http://www.doc.gold.ac.uk/seminars/AISB/Philosophy+Computing.html>

Poster advertising the CFP: <http://www.doc.gold.ac.uk/seminars/AISB/poster.pdf>