The interplay between AI, creativity and autonomy is currently an exciting area of research in artificial intelligence and cognitive science. This is evidenced, for example, by the many stimulating papers submitted to and subsequently presented at the recent 2011 AISB Computing and Philosophy workshop.

Fundamental to the notion of what it is to be human, and alongside ideas about intelligence and autonomy, are questions about what it is to be creative. Issues of “computational creativity” therefore lie at the heart of the intersection of A.I., Cognitive Science, Philosophy, and the Arts.

An autonomous system is typically considered to be a self-determining system, as distinguished from a system whose behaviour is explicitly externally engineered. The concept of autonomy (and autonomous systems) is therefore central to understanding both intelligent and cognitive systems. In the area of robotics, for instance, issues of embodiment and autonomy are core to the practise of A.I. and, in the development of enactivism and emergence, conceptually central to a modern understanding of cognition (an area recently explored by Evan Thompson in his 2007 monograph, ‘Mind in Life’). Indeed, some commentators such as Maturana and Varela - in their seminal work on autopoiesis and cognition - go so far as to suggest autonomy a necessary hurdle over which any ‘living machine’ with a claim to genuine teleology must leap.

Call
To investigate the interplay between these three areas the Cognitive Computation journal plans to publish a special issue on Computational Intelligence, Creativity and Autonomy. We invite all those working in these (typically interdisciplinary) areas to participate in the project by contributing a paper for consideration to the special issue. In this call we particularly encourage submissions that address one or more of the following themes: the philosophy of autonomous computational systems; human and machine creativity; the engineering of intelligent, autonomous and creative systems; Belief-Desire-Intention models for developing autonomous systems.

Requirements
In preparing your paper for submission, please consult the journal’s stylistic requirements, which include details about word limit and format. This can be found in the section ‘Instructions for Authors’: http://www.springer.com/biomed/neuroscience/journal/12559

Timeline
Submissions Deadline November 1st, 2011
Publication of special issue June 2012

Computing and Philosophy Workshop at the AISB ’11 Convention:
Please contact Prof. Mark Bishop or Dr Yasemin J. Erden for further information: erdenyj@smuc.ac.uk or M.BISHOP@gold.ac.uk