

## Network Action Proposal

Title:	Symposium on Grand Challenge: Architecture of Brain and Mind
Membership number(s)	17
Member name(s)	Aaron Sloman
Member institute/company name(s)	School of Computer Science, University of Birmingham, UK
Goals of the action	<p>Hold a two day symposium at AISB06 3-4<sup>th</sup> April in Bristol, as part of AISB06. The symposium will have up to 10 invited speakers talking about different aspects of the Grand Challenge project on 'Architecture of Brain and Mind' described in <a href="http://www.cs.bham.ac.uk/research/cogaff/gc/">http://www.cs.bham.ac.uk/research/cogaff/gc/</a>. There will also be discussion sessions and a poster session. There is already a web site with draft, partial list of speakers and other information about objectives and structure of symposium, most of the speakers, themes for the meeting and draft structure for the meeting <a href="http://www.cs.bham.ac.uk/research/cogaff/gc/aisb06/">www.cs.bham.ac.uk/research/cogaff/gc/aisb06/</a></p> <p>This is a sequel to the interdisciplinary 2 day tutorial on Representation and Learning and Animals and machines held at IJCAI'05 organised by A.Sloman and B.Schiele in July 2005, and described by many present as extremely stimulating and challenging. <a href="http://www.cs.bham.ac.uk/research/projects/cosy/conferences/">www.cs.bham.ac.uk/research/projects/cosy/conferences/</a></p> <p>It is hoped that the symposium will especially inspire young researchers to think about steps required to move towards long-term objectives, as opposed to merely improving performance of existing modules.</p>
Principal activity to which it contributes <ul style="list-style-type: none"> <li>○ Outreach</li> <li>○ Scientific Outlook</li> <li>○ Education</li> </ul>	All three.
Principal area to which it applies <ul style="list-style-type: none"> <li>○ Underlying paradigms</li> <li>○ Scientific foundations</li> <li>○ Functional capabilities</li> <li>○ Practical competences</li> <li>○ Topical issues</li> </ul>	<p>Underlying paradigms and scientific foundations, with emphasis on the problems of characterising <i>requirements</i> for building human-like systems, and the long term problems of integrating multiple kinds of functionality within a single human-like robot.</p> <p>The grand challenge includes aiming (eventually) to explain how high level 'virtual machine' cognitive functions can be implemented in lower level physiological machines.</p>
Concrete outcomes of the action	<p>Two day symposium, April 3-4 2006.</p> <p>An informal booklet with the aims of the symposium, background relating to the Grand Challenge, information about speakers and initial statements by the speakers will be available through the main conference organisers in paper, possibly including poster abstracts, and also on the symposium web site.</p> <p>The web site will be left in place indefinitely after the event and those attending will be invited to submit afterthoughts, relevant papers, and links to related work.</p>
Effort in person-days that will be charged to the Network Action (if any)	None

<p>Expected start and duration in months</p>	<p>Travel starts on 2<sup>nd</sup> April 2006, or possibly earlier for speakers from overseas.</p> <p>Symposium starts 3<sup>rd</sup> April, duration 2 days. The website will last indefinitely.</p>
<p>The requested funding, under the following headings:</p> <ul style="list-style-type: none"> <li>○ Travel Costs</li> <li>○ Other Costs (check with the Network Coordinator if you aren't sure about eligibility of these costs)</li> <li>○ Labour Costs (identify the number of person-days and the rate per day).</li> </ul>	<p>See breakdown on page 4</p> <p>Air-fare and ground travel up to 3380 euro</p> <p>Hotel (B&amp;B) up to 4000 euro</p> <p>meals : up to 900 euro</p> <p>conference fees: up to 2130 euro</p> <p>contingency 200 euro</p> <p>no labour costs</p> <p>TOTAL: 10610 euro (see breakdown on next page) (For 10 speakers)</p>
<p>Please identify any other sources of funding that contribute to this Action</p>	<p>None expected. The registration fee contributes to conference plenary speakers listed here <a href="http://www.aisb.org.uk/convention/aisb06/programme.html">http://www.aisb.org.uk/convention/aisb06/programme.html</a> which will also be relevant to our symposium (whose timetable has gaps for the plenary talks). If I have a shortfall I shall either have to find funds from my own budget or ask the invited speakers to contribute.</p>
<p>Speakers who have accepted so far (in alphabetical order)</p>	<p>Jackie Chappell How do animals gather useful information about their environment and act on it?</p> <p>Mike Denham The role of the neocortical laminar microcircuitry in perception, cognition, and consciousness (provisional)</p> <p>Steve Furber High-Performance Computing for Systems of Spiking Neurons</p> <p>Jeffrey L. Krichmar Brain-based devices for the study of nervous systems and the development of intelligent machines.</p> <p>Mark Lee Developmental Robotics: an emerging paradigm for intelligent agents.</p> <p>Murray Shanahan Cognition and Consciousness: Is There a Fundamental Link?</p> <p>Aaron Sloman Requirements for a robot with human child-like or crow-like visual capabilities.</p> <p>Mark Steedman to be added (a topic related to language and cognition)</p> <p>Tom Ziemke Integrating Cognition, Emotion and Autonomy (provisional)</p> <p>More details here <a href="http://www.cs.bham.ac.uk/research/cogaff/gc/aisb06/speakers.html">http://www.cs.bham.ac.uk/research/cogaff/gc/aisb06/speakers.html</a></p>

<b>ESTIMATED COSTS</b>	<b>EURO (approx)</b>
Flights outside UK	
J. Krichmar	665
T. Ziemke	295
Possibly one other cost up to	900
UK Travel for (train and air) Chappell, Denham, Furber, Lee, Shanahan, Sloman, Steedman.	620
Local travel at both ends of journeys (taxis, buses, trains for overseas speakers), etc.	900
Accommodation at Berkeley Square hotel at GBP90 per night, including breakfast:	4000
Meals including dinners 2 <sup>nd</sup> -- 4 <sup>th</sup> April for speakers.	900
Registration (up to 155GBP for 2days per speaker – includes costs of conference plenary speakers and lunches)	2130 (possibly less if more than 2 people are SSAISB members)
<b>Contingency, if permitted:</b>	<b>200</b>
<b>TOTAL (Euro)</b>	<b>Total: 10610</b>