

## Network Action Proposal

Title:	Collection of educational materials for machine learning, in support of cognitive systems
Membership number(s)	68
Member name(s)	Robert Fisher
Member institute/company name(s)	Univ of Edinburgh
Goals of the action	<p>Development of a set of web pages that collates pointers to existing materials in the area of machine learning.</p> <p>The materials represented in the machine learning web pages will underpin most of the technical work in cognitive systems through being the key technology that allows both short and long term adaptation to a changing environment. Thus, the web pages are a supporting action for cognitive systems.</p> <p>In particular, we aim to collect a set of resource types:</p> <ul style="list-style-type: none"> <li>past conference tutorials/survey notes/reviews</li> <li>course notes</li> <li>online demos</li> <li>experimental datasets</li> <li>explanatory materials</li> <li>publicly available software</li> <li>book lists</li> </ul> <p>The explanatory materials will be in the form of a tree, with major topics and specialisations or alternative approaches. Eg. like the CVonline tree, except without as much depth or content.</p> <p>Draft web pages are at:  <a href="http://homepages.inf.ed.ac.uk/rbf/IAPR/researchers/">http://homepages.inf.ed.ac.uk/rbf/IAPR/researchers/</a></p> <p>where the row of relevance is the one labeled "Machine Learning".</p> <p>We ask for support for 250 hours of PhD student time, which is about 30 hours for each of the 7 categories above (plus 40 more hours described below). This resource is not going to be exhaustive, but we hope that it will lead to e.g. 100 entries for each category. Hopefully too, the entries will be high-quality sites already (eg. the Kalman Filter Home Page at:  <a href="http://www.cs.unc.edu/~welch/kalman/">http://www.cs.unc.edu/~welch/kalman/</a>)</p> <p>The remaining 40 hours will be to support the development of 5 "Cognitive Briefings" on topics from Machine Learning that are central to cognitive systems.</p> <p>This support is requested for the collection, categorisation and display of existing content, and is not intended to support the development of a sophisticated website (although a wiki is being considered as a possibility once we experience the structure and the amount of content for the current version.).</p> <p>This work will be done in collaboration with the International Association for Pattern Recognition. Bob Fisher is the chair of its Education Standing Committee.</p>

<p>Principal activity to which it contributes</p> <ul style="list-style-type: none"> <li>○ Community Outreach</li> <li>○ Scientific Outlook</li> <li>○ Education &amp; Training</li> </ul>	<p>Education</p>
<p>Concrete outcomes of the action (at least one of which should be material suitable for publication on the euCognition website)</p>	<p>* A set of web pages containing links to machine learning materials useful for supporting students, educators and researchers.</p> <p>* 5 Cognition Briefings</p>
<p>Effort in person-days that will be charged to the Network Action (if any)</p>	
<p>Expected start and duration in months</p>	<p>February 2007 - Dec 2007</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>Travel: 0</p> <p>Other costs: 0</p> <p>Labour: PhD student labour: 250 hours * 21 euros/hour = 5250 euros</p> <p>Overheads: standard</p>
<p>Please identify any other sources of funding that contribute to this Action (actions to support events such as workshop and conferences should include an outline budget identifying the total cost)</p>	