

Network Action Proposal

Title:	Cognitive robotics: from laboratory to media
Membership number(s)	94
Member name(s)	Catalin BUIU
Member institute/company name(s)	Polytechnic University of Bucharest, Romania
Goals of the action	<p><u>To publish a book on how to build a mobile service robot with cognitive abilities.</u></p> <p>The <i>ReMaster</i> project at the <i>Lab of Autonomous Robotics</i> of the <i>Politehnica University of Bucharest</i> concerns the development of a cognitive robot to be used in ecological applications (to recognize, collect and sort waste: batteries, bottles, and cans). A first working prototype, <i>ReMaster One</i>, has been built. The robot is using a cognitive vision system and is able to recognize objects by means of categorization.</p> <p>The book will document the expertise acquired so far (construction of the robot, cognitive vision, navigation, control, etc.). The main part of the book will be dedicated to the cognitive vision abilities of the robot. The estimated length is 300-400 pages and the book will include a CD/DVD with all the related code and stuff.</p> <p>The target audience is represented by students at all levels from our University, firstly by Bachelor and Master students taking the “Cognitive Systems” and “Cognitive Robotics” courses and by other interested engineers and individuals. The book which is to be written in Romanian is already included in the plans of POLITEHNICA Press and waits for funding.</p> <p>The tentative title is: “How to build a mobile service robot with cognitive abilities”. Estimated publication date is January 27, 2008.</p>
Principal activity to which it contributes	All three.
Concrete outcomes of the action (at least one of which should be material suitable for publication on the euCognition website)	<ol style="list-style-type: none"> 1. A detailed book on how to build a mobile service robot with cognitive abilities (includes CD/DVD with related code, etc.). 2. For the book chapter treating cognitive vision there will be an English extended summary that will be published on the euCognition website.

Effort in person-days that will be charged to the Network Action (if any)	Nothing that will be charged.
Expected start and duration in months	August 1, 2007 – January 27, 2008
<p>The requested funding, under the following headings:</p> <ul style="list-style-type: none"> ○ Travel Costs ○ Other Costs (check with the Network Coordinator if you aren't sure about eligibility of these costs) ○ Labour Costs (identify the number of person-days and the rate per day). 	<p>Printing costs: 3000 Euro for 200-300 copies with CD/DVD included.</p> <p>Promotional materials for the book: 300 Euro</p> <p>3300 Euro TOTAL REQUESTED</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)	The ReMaster One prototype was sponsored by Ericsson Romania which financially contributed to the acquisition of various components.