Multi-Role Shadow Robotic System for Independent Living

Fact Sheet

Project Information

SRS
Grant agreement ID: 247772
Funded under
FP7-ICT

Start date
1 February 2010
End date
30 April 2013

Overall budget
€ 5 136 039
EU contribution
€ 3 650 000

Coordinated by
CARDIFF UNIVERSITY
United Kingdom

Project description

ICT ICT & Ageing

The project focuses on the development and prototyping of remotely-controlled, semi-autonomous robotic solutions in domestic environments to support elderly people. In particular, the SRS project will demonstrate an innovative, practical and efficient system called "shadow robot" for personalised home care.
Most elderly people want to live in the familiar environment of their own residence for as long as possible. However, not many can live with their adult children and therefore, at some stage, often late in life, have to live alone. Studies show that some forms of home care are usually required as they advance in years.SRS solutions are
designed to enable a robot to act as a shadow of its controller. For example, elderly parents can have a robot as a shadow of their children or carers. In this case, adult children or carers can help them remotely and physically with tasks such as getting up or going to bed, doing the laundry and setting up ICT equipment etc. as if the children or carers were resident in the house. This objective will be realised through the following SRS innovations: 1) A new intent-based remote control mechanism to enable the robots to be tele-operated over a real-world communication network robustly. 2) An adaptive automation mechanism to enable a highly efficient task execution for remotely controlled service robots. 3) A new robotic self-learning mechanism to enable the robots to learn from their experience. 4) A safety-oriented framework derived through extensive usability and user acceptance studies that enable service robots to be effectively deployed into home care applications. The shadow robot prototypes created with EU support in the SRS project will be tested at the "S.Maria Nascente" Centre in Milano and the IZA Care Center in San Sebastián. The final solution will be further developed by Hewlett-Packard and other industrial partners of the consortium for a worldwide market with significant potential and volume.

Programme(s)

Topic(s)

Call for proposal

FP7-ICT-2009-4

Funding Scheme

Coordinator

CARDIFF UNIVERSITY

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Newport Road 30-36
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Activity type
Higher or Secondary Education Establishments

EU contribution
€ 825 289

Website
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<tr>
<th>Participant</th>
<th>Country</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity Type</th>
<th>Contact Information</th>
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<td>PROFACTOR GMBH</td>
<td>Austria</td>
<td>€ 208 603</td>
<td>Im Stadtgut D1, 4407 Steyr Gleink</td>
<td>Other</td>
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<td>ACMIT GMBH</td>
<td>Austria</td>
<td>€ 125 406</td>
<td>Viktor Kaplan Strasse 2, 2700 Wiener Neustadt</td>
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<td>CENTRAL LABORATORY OF MECHATRONICS AND INSTRUMENTATION OF THE BULGARIAN ACADEMY OF SCIENCES</td>
<td>Bulgaria</td>
<td>€ 20 850</td>
<td>Acad. G. Bonchev Str. - Block 1, 1113 Sofia</td>
<td>Research Organisations</td>
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<td>INSTITUT PO ROBOTIKA</td>
<td>Bulgaria</td>
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**HOCHSCHULE DER MEDIEN**

EU contribution € 247 670

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<td>FUNDACION INSTITUTO GERONTOLOGICO MATIA - INGEMA</td>
<td>Spain</td>
<td>€ 208 180</td>
<td>Camino De Los Pinos 35 20018 Donostia San Sebastian</td>
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<td>ROBOTNIK AUTOMATION SLL</td>
<td>Spain</td>
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<td>Carrer De Barcelona, 3-A. P.i. Fuente Del Jarro 46988 Paterna</td>
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<td>HEWLETT PACKARD ITALIANA SRL</td>
<td>Italy</td>
<td>€ 238 900</td>
<td>Via G Di Vittorio 9 20063 Cernusco Sul Naviglio Mi</td>
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EU contribution
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