PROJECT AIMS

RAMCIP aims to research and develop real robotic solutions for assistive robotics for the elderly and those suffering from Mild Cognitive Impairments and mild Alzheimer Disease (AD).

This is a key step to developing a wide range of assistive technologies.

We adopt existing technologies from the robotics community; fuse those with user-centered design activities and practical validation, with the aim to create a step-change in robotics for assisted living.

STATE OF PLAY

The RAMCIP robot has been developed. Pilot trials are performed in 12 different end user homes in Barcelona, Spain and in a simulated apartment in Lublin, Poland. Preliminary tests have been held in the CERTH-ITI smart home in Thessaloniki, Greece.

THE RAMCIP VISION

- Research and development of a novel domestic service robot:
- Capable to provide proactive and discreet assistance
- In a series of significant aspects of the user’s daily life

- Focus on the needs of people with Mild Cognitive Impairment (MCI) and evolving dementia
- To support independent living and quality of life

KEY FACTS

- Contract Nr: 643433
- Consortium: 8 partners from 6 countries
- Start: January 2015
- Duration: 3 years
- Programme: PHC-19-2014
- Budget: € 3,98 M.
- Further info: www.ramcip-project.eu

HOW TO ASSIST

<table>
<thead>
<tr>
<th>Food preparation</th>
<th>Eating activities</th>
<th>Dressing activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>Lower-body treatment activities</td>
<td>Taking medication</td>
</tr>
<tr>
<td>Managing the home and keeping it safe</td>
<td>Maintaining positive affect</td>
<td>Exercising cognitive and physical skills</td>
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<th>high-level cognitive functions</th>
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<tbody>
<tr>
<td>Human Robot Communication</td>
</tr>
<tr>
<td>Safe Manipulations</td>
</tr>
<tr>
<td>Multimodal</td>
</tr>
<tr>
<td>Adaptive</td>
</tr>
<tr>
<td>Empathic</td>
</tr>
<tr>
<td>Touch screen - speech - gestures - AI</td>
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<tr>
<td>Object Grasping/ Manipulation/Handover/ High Object Reaching/ pRiH</td>
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</tbody>
</table>

ROBOTIC ASSISTANT FOR MCI PATIENTS AT HOME
SPECIFIC OBJECTIVES

- **Objective 1**: To develop a service robot that will be capable of robustly understanding actions, complex activities and behaviour of multiple persons in the user’s home.

- **Objective 2**: To develop a service robot that will provide proactive, discreet and optimal assistance to the user.

- **Objective 3**: Establishment of advanced communication channels between the user and the robot.

- **Objective 4**: Establishment of advanced physical interaction between the robot and the home environment.

- **Objective 5**: Establishment of assistance activities involving physical interaction between the robot and the user.

- **Objective 6**: To validate RAMCIP project results in real-life scenarios.

PARTNERS

The RAMCIP Consortium consists of 8 complementary partners from 6 different European Countries, namely Greece (Thessaloniki, Heraklion), Germany (Munich), Italy (Pisa), Poland (Lublin), Spain (Barcelona) and United Kingdom (London).

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