

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 smarthome 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

ASSIST IN...	Food preparation	Eating activities	Dressing activities		
	Socialization	Lower-body treatment activities	Taking medication		
	Managing the home and keeping it safe	Maintaining positive affect	Exercising cognitive and physical skills		
HOW TO ASSIST	High-level cognitive functions				
	Home Environment and Human Activity Modelling and Monitoring	Human Robot Communication		Safe Manipulations	
		Multimodal	-Touch screen		Object Grasping/ Manipulation/Handover High object Reaching pHRI
		Adaptive	-Speech		
Empathic	-Gestures	-AR			

Safe, Proactive and Discrete Assistance

- 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

“A novel robot to provide proactive and discreet assistance to elderly people with Mild Cognitive Impairment (MCI) in their own 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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Robotic Assistant for MCI Patients at home

