Robotic Assistant for MCI patients at home
H2020-PHC-2014-2015
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The past, present and future of European service robotics for eldercare and assisted living
ERF 2017 Workshop

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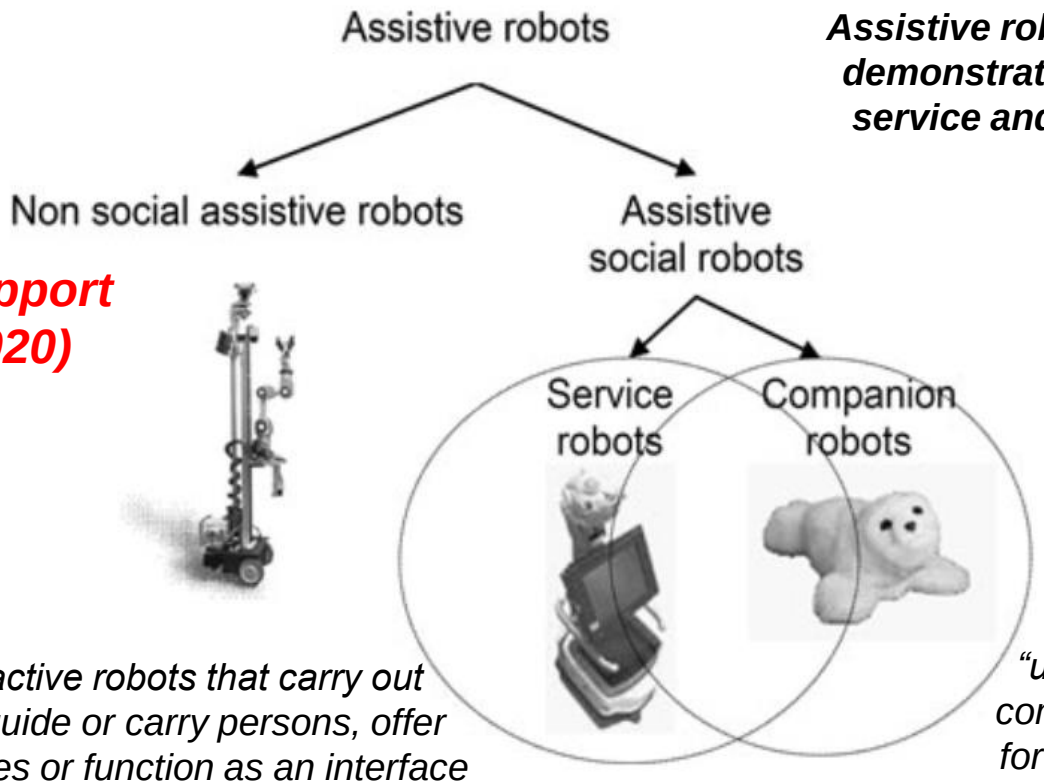
Workshop motivation and objective

The past, present and future of European service robotics for eldercare and assisted living

- Frailty and cognitive impairments put risks on older populations
- Ageing in place is key for prolonged active and healthy ageing
  - Challenge often difficult to meet
    - Needs supervision and assistance provision from formal or informal human caregiver in the older person's home, often on a constant basis
  - Domestic service robotics solutions could help alleviate this, relieving some of the caregiving burden
- Workshop aims:
  - To summarize key achievements of past and present EU research projects in service robotics for assisted living
  - To discuss on applications and key challenges
    - when service robots are to be applied in the real home environments of those in need

Assistive robots taxonomy

Key workshop participants



Assistive robots of the future can demonstrate a mixture between service and companion robots features

i-Support (H2020)

"socially interactive robots that carry out service tasks; guide or carry persons, offer butler-like services or function as an interface to smart home devices"

"used for social companionship or for robot assisted therapy"

HOBBIT (FP7)

RAMCIP ***RADIO*** ***Enrichme*** ***(H2020)***

Categorization of robots in eldercare

Heerink, M., Kröse, B., Evers, V., & Wielinga, B. (2010). Assessing acceptance of assistive social agent technology by older adults: the almere model. Int'l J. of social robotics, 2(4), 361-375.

Workshop approach

- Short presentations by the organizers and invited speakers
  - Applications supported by service robots developed from past and present EU-funded projects
  - Key added value for the target end users
  - Key challenges encountered towards their use in the real practice

- End user and industrial perspectives
  - Key user needs and expectations and acceptability issues
  - Advanced products being developed by European robot companies within EU-funded research projects
    - with a view to better suit the needs of future practical applications

Workshop agenda

- 16:15 – 16:18: Introduction by the moderator - workshop scope and participants summary (Dimitrios Tzovaras)
- 16:18 – 16:54: Short (7-min) presentations related to past and present EU-funded research projects on service robots for assisted living
  - The FP7 HOBBIT project; key advances, applications and challenges (Markus Vincze)
  - The H2020 RAMCIP project; developing a service robot for MCI patients at home (Dimitrios Tzovaras)
  - The H2020 RADIO project; coupling service robots with smarthome infrastructures (Stasinos Konstantopoulos)
  - The H2020 Enrichme project; a mobile robot for elderly with MCI (Matteo Bonasso)
  - The H2020 I-Support project; developing a domestic service robot for bathing tasks (Cecilia Laschi)
- 16:54 – 17:02 Insights on end user needs, expectations and acceptability issues for service robots (Carla Abdelnour)
- 17:02 – 17:10 Development of advanced service robot products to better suit practical needs (Rich Walker)
- 17:10 – 17:40 Discussion/brainstorming session
- 17:40 – 17:45 Workshop conclusions and closure

Thank you

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