



research



elderly



cooperation

CEIT RALTEC

Institute of Rehabilitation and Assisted Living Technologies

CEIT RALTEC is a nonprofit research institute that concentrates its work on the development of new ICT in the area of Ambient Assisted Living, rehabilitation technology, eHealthcare and eHomecare for an autonomous and safe living.

we are...

...researchers

Interdisciplinary Evaluation
within the Living Lab Schwechat

Inclusion of End-user Groups
in all steps of the project life-cycle

Smart Home Solutions
for a safe and comfortable living

The CEIT RALTEC team consists of a group of researchers, engineers and usability experts. We develop special technologies for rehabilitation and Ambient Assisted Living (AAL) in close collaboration with people that have special needs, as well as physicians, therapists and caregivers.

We direct the focus of our development on technologies to overcome barriers to enable and prolong a self-determined and independent living and well-being ageing.

Wearable Electronics
for therapy, diagnosis & fall prevention

Activation and Training
via useable, barrier free ict solutions

Robots
as User Interface



...users

We strongly involve elderly persons and caregivers in our research activities based on participatory design principles and strict ethical guidelines that protect the integrity of vulnerable persons. Our user centered approach ensures that the technical development meets the actual needs and wishes of the users. Since 2006, we work in close cooperation with the local centre for senior citizens, as well as care providers and the advisory board of seniors in the city of Schwechat.



...and a whole city

The city of Schwechat is committed to be a "Living Lab", an innovative community open to explore possibilities offered by new technologies. Local authorities, social care providers, elderly persons, caregivers, research entities and companies cooperate closely in order to work on new solutions supporting the quality of life and the independent living of senior citizens.



we do...

Usability Evaluation & Interface Design

Our project work is based on a strong end user involvement. Deploying user centered methodologies we develop and evaluate new technologies jointly with potential users.



Human Robot Interaction

We investigate and evaluate human robot interaction factors (e.g. acceptance and usability) of socially assistive robots that support elderly people with their daily activities, care needs and self-management of diseases.



Autonomous Living

To allow seniors to live longer in their own private home, we work on intelligent environments specially designed for the needs of older people. We analyze behavioural patterns so that critical situations can be discovered and in certain cases prevented.



Fall Detection & Prevention

We develop new methods - including wearable electronics and movement monitoring systems - to realize reliable, useable solutions for fall prevention and detection. In this way elderly people and caregivers can estimate the risk of falls and intervene at an early stage.

Key Projects

Funded by the European Union:

- Long Lasting Memories (ICT/PSP)
- KSERA (FP7)
- Intelligent Sanitary Unit (research for SME)
- Softcare (AAL JP)

Nationally funded:

- eHome (FIT/IT)
- vitaliSHOE (benefit)
- MyTablet (netidee)
- PhysicAAL (benefit)
- AAL demo apartment

More information on <http://projects.raltec.at>

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SCHWECHAT

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