**Type:** Entertainment Robot

**Company:** Sony

**Research Project:**

**Target Group:** young people / children

**Technology Readiness:** 10-Commercial

**Reference Link:** http://www.sony-aibo.com

**Country:** JP

**Year:** 2006

**est. Price:** approx. 2500€

**Description:**
Entertainment robot that resembles the look and behavior of a dog. Although over 150,000 units were sold worldwide, the product was discontinued in 2006 because of poor profit.

**Application Domain:**
Entertainment

**AAL Robot Features:**
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

http://www.sony-aibo.com
Robotic Manipulation

ASIBOT is a manipulator robot with 5 DOF, about 10 kg of weight, 1.3 m of reach and 2 kg of payload. The feature that makes the robot unique is the fact that all the control system is on-board. It needs only 24V external power supply for start working. This is why the robot is totally portable with the weigh and size (after homing) that permit them to be transported, for example, as a hand bag in the airplanes. The climbing ability of the ASIBOT transforms it into a mobile robot able to move in domestic and office structural environments.

The robot applications are oriented mainly to domestic assistive task for elderly and diseased people. The applications that have been tested in real environments and with real patients are: eating, drinking, shaving, make up, tooth cleaning, etc. The robot is under testing in the National Hospital for Tetraplegics in Toledo now.

Application Domain:

Personal Care Support
Physical Support

AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seciors
- improves/maintains independent living

- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes
The active hoist, aks-torneo II, is designed for users with residual mobility. The movement of the patient is optimally supported through the hoist.

**Application Domain:**
Mobility Support

**AAL Robot Features:**
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

**Company:** AKS
**Country:** GER
**Year:** 2012
**Target Group:** impaired people
**Technology Readiness:** 10-Commercial
**Est. Price:** 2300€

[http://www.aks.de/sites/torneoii.html](http://www.aks.de/sites/torneoii.html)
Description:
Supports patients suffering from stroke, spinal cord injury, Multiple Sclerosis and Parkinson’s Disease, which often have a hard time walking. A popular therapy, BWSTT (body-weight supported treadmill training) attempts to retrain a patient’s mind and muscles to walk properly.

Application Domain:
Rehabilitation Support

AAL Robot Features:
- Assists activities of daily living/working
- Specific design for older adults
- No specific design, but seems usable by seniors
- Improves/maintains independent living
- ☒ is capable of visible motion
- ☒ has sensors and actuators
- ☒ makes sensor/knowledge-based decisions
- ☒ motion in two or more axes

Company: HealthSouth Corporation
Country: US
Year: 2002
Est. Price: n.a.

Research Project:
Target Group: impaired people
Technology Readiness: 10-Commercial
Reference Link: http://www.healthsouth.com/experience-healthsouth/the-healthsouth-difference/leading-technology/autoambulator/
Type: Personal Care Robot

Company: Bestic

Description:

Bestic can best be described as a small, robotic arm with a spoon in the end that can easily be maneuvered.

By choosing a suitable control device, the user can independently control the movement of the spoon on the plate and choose what and when to eat.

Application Domain:

Physische Unterstützung
Personal Care Support
Physical Support

AAL Robot Features:

✓ assists activities of daily living/working
✓ specific design for older adults
✓ improves/maintains independent living
✓ is capable of visible motion
✓ has sensors and actuators
✓ makes sensor/knowledge-based decisions
✓ motion in two or more axes

Type: Fetch & Carry Support

Company: Savioke
Research Project: PotenziAAL
Target Group: General public
Technology Readiness: 9 - Actual system proven through successful mission operations
Reference Link: http://www.savioke.com

Country: US
Year: 2014
Est. Price: Unknown

Description:
Butler for hotel chain. Delivers small items autonomously from the reception to the rooms

Application Domain:
Fetch & Carry

AAL Robot Features:
- ☒ assists activities of daily living/working
- ☐ specific design for older adults
- ☐ no specific design, but seems usable by seniors
- ☒ improves/maintains independent living
- ☒ is capable of visible motion
- ☒ has sensors and actuators
- ☒ makes sensor/knowledge-based decisions
- ☒ motion in two or more axes

http://www.savioke.com
Type: Household Robot

**Braava**

<table>
<thead>
<tr>
<th>Company: iRobot</th>
<th>Country: US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td>Year: 2010</td>
</tr>
<tr>
<td>Target Group: general public</td>
<td>est. Price: 300€</td>
</tr>
<tr>
<td>Technology Readiness: 10-Commercial</td>
<td>Reference Link: <a href="http://www.irobot.at/">http://www.irobot.at/</a></td>
</tr>
</tbody>
</table>

**Description:**

This cleaning device wipes floors with wet or dry tissues.

![Image of Braava robot](http://www.irobot.at/Shop/Robots/Braava/300-Serie/iRobot-Braava-320-Floor-Mopping-Robot)

**Application Domain:**

Haushaltstätigkeiten
Cleaning
Housekeeping Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

potenziAAL
Budgee for assistive living

**Description:**
Budgee follows you with a bag, in which you place your items. You can take Budgee shopping or for excursion - it will follow you around and keep your hands free from heavy carrying.

**Application Domain:**
Fetch & Carry

**AAL Robot Features:**
- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- ☐ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

**Company:** Five Elements Robotics

**Research Project:**

**Target Group:** older adults

**Technology Readiness:** 10-Commercial

**Reference Link:** http://5elementsrobotics.com

http://www.33rdsquare.com/2014/01/simple-and-effective-budgee-robot-is.html
Companion Robot

Care-O-bot 4

Type: Companion Robot

Company: Fraunhofer IPA
Research Project:
Target Group: care staff

Country: GER
Year: 2015
est. Price: 70.000 -150.000 €

Technology Readiness: 7-System prototype demonstration in an operational environment
Reference Link: http://www.care-o-bot.de/

Description:
Care-O-bot 4 is the product vision of a mobile robot assistant to actively support humans in their daily life. It can be used for a variety of household tasks, for example to deliver food and drinks, to assist with cooking or for cleaning.

Application Domain:
soziale Unterstützung, Kommunikation
Physische Unterstützung
Communication & Social Support
Fetch & Carry
Cognitive / Emotional Support
Entertainment
Monitoring of Health, Security or Safety

AAL Robot Features:
• assists activities of daily living/working
• specific design for older adults
• no specific design, but seems usable by seiers
• improves/maintains independent living

• is capable of visible motion
• has sensors and actuators
• makes sensor/knowledge-based decisions
• motion in two or more axes

http://www.care-o-bot.de/
**Type:** Companion Robot

**CareBot**

<table>
<thead>
<tr>
<th>Company:</th>
<th>Geckosystems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country:</td>
<td>US</td>
</tr>
<tr>
<td>Year:</td>
<td>2009</td>
</tr>
<tr>
<td>est. Price:</td>
<td>18500 USD</td>
</tr>
</tbody>
</table>

**Target Group:** older adults

**Research Project:** 7-System prototype demonstration in an operational environment

**Reference Link:** [http://www.geckosystems.com](http://www.geckosystems.com)

**Description:**
The CareBot is designed as a companion robot that supports older users at home and was the first eldercare assistance robot to be tested in an actual home environment.

**Application Domain:**
Entertainment

**AAL Robot Features:**
- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- ✗ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes
**Type:** Household Robot

**Company:** PetNovations Ltd.

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 10-Commercial

**Reference Link:** [http://www.catgenie.com](http://www.catgenie.com)

**Description:**

self-cleaning toilet for cats.

**Application Domain:**

- Haushaltstätigkeiten
- Cleaning
- Housekeeping Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Rehabilitation Robot

CCPM

Company: FERROBOTICS
Country: AT

Research Project:
Year: 2013

Target Group: impaired people
est. Price: n.a.

Technology Readiness: 10-Commercial


Description:
This CCPM line detects eventual pain reactions of the patient, gives in and integrates them intuitively into the therapy. This very new CPM generation performs with humanlike feeling competence. Beyond the so-far limits in the automated physiotherapy CCPM optimizes both, economical efficiency and therapy quality.

Application Domain:
Rehabilitation Support

AAL Robot Features:
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seicons
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Cooki is a self-contained unit that comprises a small robotic arm positioned above a cooking pot that sits atop an induction cooktop. After selecting your desired recipe from the companion app on an Android or iOS device, you’re prompted to load the relevant trays of fresh, ready-to-cook, pre-portioned ingredients into the side of the device.

**Application Domain:**
Personal Care Support

**AAL Robot Features:**
- ☒ assists activities of daily living/working
- ☐ specific design for older adults
- ☐ no specific design, but seems usable by seicors
- ☒ improves/maintains independent living
- ☒ is capable of visible motion
- ☒ has sensors and actuators
- ☒ makes sensor/knowledge-based decisions
- ☒ motion in two or more axes

http://www.gizmag.com/cooki-robotic-chef/35510/
CoRo Platform

**Type:** Fetch & Carry Support

**Company:**

<table>
<thead>
<tr>
<th>Research Project:</th>
<th>Robot-ERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Group:</td>
<td>older adults</td>
</tr>
</tbody>
</table>

**Technology Readiness:** 6-Model or prototype demonstration in a relevant environment


**Description:**

carrier robot for indoor usage

http://www.robot-era.eu/robotera/

**Application Domain:**

Fetch & Carry

**AAL Robot Features:**

- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes
Companion Robot

**Type:** Companion Robot

**DoRo**

<table>
<thead>
<tr>
<th>Company:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Project:</strong> Robot-ERA</td>
<td><strong>Country:</strong> IT</td>
</tr>
<tr>
<td><strong>Target Group:</strong> older adults</td>
<td><strong>Year:</strong> 2014</td>
</tr>
<tr>
<td><strong>Technology Readiness:</strong> 6-Model or prototype demonstration in a relevant environment</td>
<td><strong>est. Price:</strong> n.a</td>
</tr>
</tbody>
</table>

**Description:**

Domestic robot for usage at home or in sheltered housing. Supports older users with several different applications.

**Application Domain:**

- Housekeeping Support
- Communication & Social Support
- Monitoring of Health Security or Safety
- Fetch & Carry

**AAL Robot Features:**

- Assists activities of daily living/working
- Specific design for older adults
- No specific design, but seems usable by seniors
- Improves/maintains independent living
- Is capable of visible motion
- Has sensors and actuators
- Makes sensor/knowledge-based decisions
- Motion in two or more axes

Type: Fetch & Carry Support

Doug

<table>
<thead>
<tr>
<th>Company:</th>
<th>Technology concept and/or application formulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td>n.a.</td>
</tr>
<tr>
<td>Year:</td>
<td>2012</td>
</tr>
<tr>
<td>Target Group:</td>
<td>general public</td>
</tr>
<tr>
<td>Technology Readiness:</td>
<td>2</td>
</tr>
<tr>
<td>Reference Link:</td>
<td><a href="http://www.techhive.com/article/252138/meet_the_robotic_luggage_that_follows_you_like_a_dog.html">http://www.techhive.com/article/252138/meet_the_robotic_luggage_that_follows_you_like_a_dog.html</a></td>
</tr>
</tbody>
</table>

**Description:**
suitcase on wheels, responds to sender that is worn by the user (not a serious product)

**Application Domain:**
Haushaltstätigkeiten
Mobility Support

**AAL Robot Features:**
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

http://www.techhive.com/article/252138/meet_the_robotic_luggage_that_follows_you_like_a_dog.html
Type: Companion Robot

Company: Florence
Research Project: Florence
Target Group: older adults
Technology Readiness: 6-Model or prototype demonstration in a relevant environment
Reference Link: http://www.florence-project.eu/

Description:
The project aims to create a low-cost solution which is technically feasible with the current state of technology. The Florence robot is a wheel-based, 1.5 meter height, screen-based robot with no arms. Sensor input is based on a 2D laser scanner, 3D structured light (kinect) and an (optical) camera. The robot software is based on the Robotic Operating System (ROS) – the emerging de facto standard in robotic software. In addition, the project focuses on a scalable platform-based approach that enables the addition/extension of 3rd party applications.

Application Domain:
Communication & Social Support
Monitoring of Health, Security or Safety
Cognitive / Emotional Support

AAL Robot Features:
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Country: EU
Year: 2012
est. Price: n.a

http://www.florence-project.eu/
**FRIEND**

**Company:** IAT Uni Bremen  
**Country:** GER  
**Year:** 2003-2012  
**Target Group:** impaired people  
**Technology Readiness:** 9-Actual system proven through successful mission operations  
**Reference Link:** [http://www.iat.uni-bremen.de/sixcms/detail.php?id=1090](http://www.iat.uni-bremen.de/sixcms/detail.php?id=1090)

**Description:**
The assistive robot FRIEND (Functional Robot arm with user-frIENdly interface for Disabled people) is a semiautonomous robot to support users with handicaps and older users. The robot was developed at the University of Bremen in the course of several research projects over a time span of approx. 10 years.

**Application Domain:**
- Mobility Support
- Physical Support
- Manipulation Support

**AAL Robot Features:**
- **✓** assists activities of daily living/working
- **☐** specific design for older adults
- **☐** no specific design, but seems usable by seicors
- **✓** improves/maintains independent living
- **✓** is capable of visible motion
- **✓** has sensors and actuators
- **✓** makes sensor/knowledge-based decisions
- **✓** motion in two or more axes

[http://www.iat.uni-bremen.de/sixcms/detail.php?id=1090](http://www.iat.uni-bremen.de/sixcms/detail.php?id=1090)
### Description:

The robot uses a Skype-like interface to allow e.g. relatives or caregivers to virtually visit an elderly person in the home. The robot is embedded into a smart-home environment which uses sensors to measure medical and environmental parameters.

### Application Domain:

- soziale Unterstützung, Kommunikation
- Communication & Social Support
- Monitoring of Health, Security or Safety

### AAL Robot Features:

- ✔ assists activities of daily living/working
- ✔ specific design for older adults
- ☐ no specific design, but seems usable by seniors
- ✔ improves/maintains independent living

- ✔ is capable of visible motion
- ✔ has sensors and actuators
- ✔ makes sensor/knowledge-based decisions
- ✔ motion in two or more axes

---

**Type:** Robotic Mobility Aid

---

**Company:** Google Inc.  
**Country:** US  
**Year:** 2014  
**Target Group:** general public  
**Technology Readiness:** 8-Actual system completed and qualified through test and demonstration  
**Reference Link:** [http://www.google.com/selfdrivingcar/](http://www.google.com/selfdrivingcar/)

---

**Description:**

autonomous car that drives without intervention of the user.

---

**Application Domain:** Mobility Support

---

**AAL Robot Features:**

- ✗ assists activities of daily living/working
- ■ specific design for older adults
- ■ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

---

Reference:


---

Copyright &copy; potenziAAL
**Type:** Household Robot

| Company: | Grillbot, LLC |
| Research Project: | |
| Target Group: | general public |
| Technology Readiness: | 10-Commercial |
| Reference Link: | http://grillbots.com |

**Country:** US  
**Year:** 2014  
**est. Price:** 129USD  

**Description:**
The grillbot does all the grill cleaning for you. No more scrubbing! A grillbot is easy-to-use and fun to watch.

![Grillbot](http://grillbots.com)

**Application Domain:**  
Housekeeping Support

**AAL Robot Features:**
- ✗ assists activities of daily living/working
- ■ specific design for older adults
- ■ no specific design, but seems usable by seniors
- ■ improves/maintains independent living

- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

---

potenziAAL
**Guido**

<table>
<thead>
<tr>
<th>Company:</th>
<th>Haptica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td></td>
</tr>
<tr>
<td>Target Group:</td>
<td>older adults</td>
</tr>
<tr>
<td>Technology Readiness:</td>
<td>6-Model or prototype demonstration in a relevant environment</td>
</tr>
<tr>
<td>Reference Link:</td>
<td><a href="http://www.rehab.research.va.gov/jour/00/37/6/lacey376.htm">http://www.rehab.research.va.gov/jour/00/37/6/lacey376.htm</a></td>
</tr>
</tbody>
</table>

**Description:**

The Pam-Aid looks like a closed-front walker on wheels and has bicycle-type handlebars. The person walking behind the device turns the handlebars, causing the wheels to turn. If the ultrasonic sensors detect an obstacle in front of it, the brakes prevent the user and device from colliding with it.

[Image](http://www.rehab.research.va.gov/jour/08/45/9/Rentschler.html)

**Application Domain:**

- Mobilität
- Mobility Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

The Handy 1 was developed in 1987 by Mike Topping to assist an 11 year old boy with cerebral palsy to eat unaided. The system is a low-cost, commercially available robotic system capable of assisting the most severely disabled with several everyday functions such as eating, drinking, washing, teeth cleaning, shaving and makeup application.

**Application Domain:**
Physische Unterstützung
Personal Care Support

**AAL Robot Features:**
- × assists activities of daily living/working
- □ specific design for older adults
- □ no specific design, but seems usable by seniors
- × improves/maintains independent living
- × is capable of visible motion
- × has sensors and actuators
- × makes sensor/knowledge-based decisions
- × motion in two or more axes
Type: Companion Robot

**Hector**

Company: n.a  
Research Project: Companionable  
Target Group: older adults  
Technology Readiness: 7-System prototype demonstration in an operational environment  
Reference Link: [http://www.companionable.net](http://www.companionable.net)

Description:

This prototype is developed in a series of German national and EU funded research projects and represents a typical socially assistive mobile platform to support older adults at home.

Application Domain:

- Cognitive / Emotional Support
- Monitoring of Health Security or Safety
- Entertainment
- Communication & Social Support
- Monitoring of Health, Security or Safety

AAL Robot Features:

- assist activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Country: GER  
Year: 2012  
est. Price: n.a

http://www.plasticpals.com/?attachment_id=33946
Sanyo unveiled the $50,000 HIRB ("Human In Roll-Io Bathing") system, a compact version designed for use in elderly homes. This is an ultrasonic Bath, a pod-like human washing machine that cleans, massages and dries the user in a fully automated 15-minute process.

**Application Domain:**
Personal Care Support

**AAL Robot Features:**
- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- □ no specific design, but seems usable by seniors
- □ improves/maintains independent living
- □ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- □ motion in two or more axes
**Household Robot**

**Type:** Household Robot

**Company:** e.zicom

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 10-Commercial

**Reference Link:** [http://www.e-zicomet](http://www.e-zicom.com/)

**Description:**

Multi-Surface Cleaning Robot

"Single-side surface cleaning

- No restrictions on surface thickness
- Powerful processors with AI-technology
- Embedded UPS for safety
- Convenient and ECO-friendly"

**Application Domain:**

Haushaltstätigkeiten
Cleaning
Housekeeping Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seciors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

[http://www.e-zicomet](http://www.e-zicomet)
**Description:**

Exoskeleton for the lower body, designed to support people who have disorders in the lower limb and people whose legs are weakening. Picks up nerve signals to support movement.

**Application Domain:**

Mobility Support

**AAL Robot Features:**

- ✔ assists activities of daily living/working
- ✔ specific design for older adults
- × no specific design, but seems usable by seniors
- ✔ improves/maintains independent living
- ✔ is capable of visible motion
- ✔ has sensors and actuators
- ✔ makes sensor/knowledge-based decisions
- ✔ motion in two or more axes

**Company:** Cyberdyne

**Research Project:**

**Target Group:** older adults

**Technology Readiness:** 10-Commercial

**Reference Link:** http://www.cyberdyne.jp/english/products/LowerLimb_medical.html
Type: Entertainment Robot

Company: Business Design Laboratory Co
Research Project: 
Target Group: older adults
Technology Readiness: 10-Commercial
Reference Link: http://www.plasticpals.com/?p=1409

Description:

ifbot is a robot that comes equipped with a camera, speakers, sound-direction recognition microphone, voice recognition and locomotion. About 45cm tall, 10kg.

Application Domain:
Entertainment
Cognitive / Emotional Support
Communication & Social Support
Monitoring of Health, Security or Safety

AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

http://shewalkssoftly.com/2008/10/04/ifbot/

Country: JP
Year: 2008
est. Price: 6000 €
**Type:** Companion Robot

**Company:** Jibo, Inc.

**Country:** US

**Year:** 2015

**Est. Price:** 749 USD

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 10-Commercial

**Description:**

JIBO is a little pod with a motorized swivel, equipped with cameras, microphones and a display. It recognizes faces and voices, and can act as a personal assistant by setting reminders, delivering messages and offering to take group photos. It also serves as a telepresence robot for video chat.

http://time.com/2994153/jibo-robot/

**Application Domain:**

Cognitive / Emotional Support
Communication & Social Support
Entertainment

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes
**Type:** Emotional Robot

**Company:** Robyn Robotics AB

**Country:** SE

**Research Project:**

**Year:** 2014

**Target Group:** older adults

**Technology Readiness:** 10-Commercial

**Reference Link:** [http://www.robynrobotics.se](http://www.robynrobotics.se)

**Description:**

Alternative to the PARO seal robot. Was developed to support older users with dementia inside of care institutions and at homes. Simulates breathing, purring, meowing. Senses petting or harassing and reacts upon it.

<table>
<thead>
<tr>
<th>Application Domain:</th>
<th>AAL Robot Features:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive / Emotional Support</td>
<td>- assists activities of daily living/working</td>
</tr>
<tr>
<td></td>
<td>- specific design for older adults</td>
</tr>
<tr>
<td></td>
<td>- no specific design, but seems usable by seniors</td>
</tr>
<tr>
<td></td>
<td>- improves/maintains independent living</td>
</tr>
<tr>
<td></td>
<td>- is capable of visible motion</td>
</tr>
<tr>
<td></td>
<td>- has sensors and actuators</td>
</tr>
<tr>
<td></td>
<td>- makes sensor/knowledge-based decisions</td>
</tr>
<tr>
<td></td>
<td>- motion in two or more axes</td>
</tr>
</tbody>
</table>

http://www.robynrobotics.se
DOMEO was a research project in the area of "Ambient Assisted Living", partly funded by the EU and by national funds. DOMEO aimed at the demonstration of the use of robots for providing support in the home of old people.

DOMEO:
* Showed the relevance and efficiency of an evolutionary integration platform
* Found out the needs in robotics, sensors and 24/7 communication services for the elderly
* Evaluated the deployment of the proposed systems in realistic environments

**Description:**


**Application Domain:**

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

[Link to DOMEO project website](http://www.aal-domeo.org/index.php/robots)
Type: Robotic Mobility Aid

**Liftkar PT S**

**Company:** Sano  
**Country:** AT  
**Year:** 2011  
**Est. Price:** about 5600€

**Description:**
The LIFTKAR PT S features advanced stairclimbing technology and can handle any challenge. The 130 model is designed for people up to 130 kg while the 160 is for people up to 160 kg. The soft upholstered and ergonomically-shaped seat guarantees a comfortable ride. 10, 14 or 18 stairs per minute.

**Application Domain:** Mobility Support

**AAL Robot Features:**
- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- ☐ no specific design, but seems usable by seniors
- ☐ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ☐ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

Rehabilitation Robot

Lokomat

Type: Rehabilitation Robot

Company: Hocoma
Country: CH
Year: 2007
est. Price: approx. 200000 €

Research Project:

Target Group: impaired people

Technology Readiness: 10-Commercial

Reference Link: http://www.hocoma.com/de/produkte/lokomat/

Description:
The Lokomat is a gait therapy device on a treadmill with a robotic gait orthosis, and exercises in a virtual reality environment with a constant audio and visual feedback.

Application Domain:
Rehabilitation Support

AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

http://www.sms.hest.ethz.ch/research/gait_rehab
Household Robot

Type: Household Robot

Company: iRobot
Research Project: 
Target Group: general public
Technology Readiness: 10-Commercial
Reference Link: http://store.irobot.com/irobot-looj-330

Description:
The iRobot Looj 330 Gutter Cleaning Robot blasts away leaves, dirt and clogs while brushing gutters clean. Featuring a high-velocity, four-stage auger and CLEAN mode, Looj travels down your gutter on its own, sensing and adapting to debris in order to provide the most effective cleaning.

Application Domain:
Housekeeping Support

AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Company: iRobot
Country: US
Year: 2013
est. Price: 300 USD

http://store.irobot.com/irobot-looj-330
**Type:** Household Robot

**MOVAID**

| Company: | CRIM |
| Research Project: | MOVAID |
| Target Group: | general public |
| Country: | IT |
| Year: | 1997 |
| est. Price: | n.a |

**Description:**

The MOVAID system consists of a number of fixed workstations (PCs), located where main activities are carried out at home, such as the kitchen and the bedroom, along with a mobile robotic unit able to navigate in the house avoiding unexpected obstacles, to grasp and manipulate common objects and to dock to the fixed workstations for data exchange and power supply.

**Application Domain:**

Haushaltstätigkeiten
Housekeeping Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

https://www-crim.sssup.it/research/projects/MOVAID/default.htm
**Type:** Emotional Robot

**Nabaztag / Karozt**

<table>
<thead>
<tr>
<th>Company</th>
<th>Violet / Mindscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project</td>
<td>SERA</td>
</tr>
<tr>
<td>Target Group</td>
<td>general public</td>
</tr>
<tr>
<td>Technology Readiness</td>
<td>10-Commercial</td>
</tr>
</tbody>
</table>

**Description:**
Robotic rabbit with Wi-Fi access. Tells the time and has interfaces to a variety of web-services (reads emails and RSS news feeds, reports on air quality or traffic (in Paris), plays mp3s and gives the weather forecast).

Discontinued.

**Application Domain:**
- Entertainment
- Communication & Social Support

**AAL Robot Features:**
- ☑ assists activities of daily living/working
- ☑ specific design for older adults
- ☑ no specific design, but seems usable by seniors
- ☑ improves/maintains independent living
- ❌ is capable of visible motion
- ❌ has sensors and actuators
- ❌ makes sensor/knowledge-based decisions
- ❌ motion in two or more axes
Companion Robot

Type: NAO

Assistive Robot based on the Platform NAO from Aldebaran. Several research projects built upon this robot to develop application scenarios to serve older users at home.

Company: Aldebaran
Research Project: KSERA, ...
Target Group: older adults
Technology Readiness: 7-System prototype demonstration in an operational environment
Reference Link: https://www.aldebaran.com/en

Description:

Assistive Robot based on the Platform NAO from Aldebaran. Several research projects built upon this robot to develop application scenarios to serve older users at home.

Application Domain:
kognitive/emotionale Unterstützung
soziale Unterstützung, Kommunikation
Cognitive / Emotional Support
Communication & Social Support
Entertainment
Monitoring of Health Security or Safety
Rehabilitation Support
Monitoring of Health, Security or Safety

AAL Robot Features:
• assists activities of daily living/working
• specific design for older adults
• no specific design, but seems usable by seniors
• improves/maintains independent living
• is capable of visible motion
• has sensors and actuators
• makes sensor/knowledge-based decisions
• motion in two or more axes

http://ksera.ieis.tue.nl
### Personal Care Robot

**Type:** Personal Care Robot

**Company:**

**Research Project:**

**Target Group:** older adults

**Technology Readiness:** 2 - Technology concept and/or application formulated

**Reference Link:** [http://lovetoilets.blogspot.co.at/2011/04/robotic-toilet-maintains-personal.html](http://lovetoilets.blogspot.co.at/2011/04/robotic-toilet-maintains-personal.html)

**Country:** n.a.

**Year:** 2011

**est. Price:** n.a.

**Description:**

Mobile robotic toilet; precondition for use: person has to be able to rise from bed. State of development & company unknown.

**Application Domain:**

- Physische Unterstützung
- Personal Care Support

**AAL Robot Features:**

- **X** assists activities of daily living/working
- **☐** specific design for older adults
- **☐** no specific design, but seems usable by seniors
- **X** improves/maintains independent living
- **X** is capable of visible motion
- **X** has sensors and actuators
- **X** makes sensor/knowledge-based decisions
- **X** motion in two or more axes
<table>
<thead>
<tr>
<th>Company</th>
<th>Omron</th>
<th>Country</th>
<th>JP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project</td>
<td></td>
<td>Year</td>
<td>2001</td>
</tr>
<tr>
<td>Target Group</td>
<td>older adults</td>
<td>est. Price</td>
<td>approx 1500€</td>
</tr>
</tbody>
</table>

**Description:**

Robotic Cat

Moves eyes, tail, ears, purrs, miaows, reacts on touches and pet strokes recognizes owners voice and own name. Simulates emotions

**Application Domain:**

kognitive/emotionale Unterstützung
Cognitive / Emotional Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seciors
- improves/maintains independent living

- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes
## Nursing-Care System

**Type:** Robotic Mobility Aid

| Company: | n.a. |
| Research Project: | unknown |
| Target Group: | older adults |
| Technology Readiness: | 3-Analytical and experimental critical function and/or characteristic |
| Reference Link: | Yukawa et. al. 2012 |

**Description:**
- a normal wheelchair
- transforms into bed
- is combined with a lift for bathing
- houses a mobile toilet robot under the seat

**Application Domain:**
- Mobility Support
- Personal Care Support

**AAL Robot Features:**
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

Yukawa et. al. 2012

---

potenziAAL
## Fetch & Carry Support

<table>
<thead>
<tr>
<th>Company:</th>
<th>Country: IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project: Robot-ERA</td>
<td>Year: 2014</td>
</tr>
<tr>
<td>Target Group: older adults</td>
<td>est. Price: n.a</td>
</tr>
</tbody>
</table>

**Technology Readiness:** Model or prototype demonstration in a relevant environment


### Description:

carrier robot for outdoor usage

### Application Domain:

- Fetch & Carry Mobility Support

### AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

[http://www.robot-era.eu/robotera/]
**Type:** Emotional Robot

<table>
<thead>
<tr>
<th>Company:</th>
<th>AIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td></td>
</tr>
<tr>
<td>Target Group:</td>
<td>older adults</td>
</tr>
<tr>
<td>Technology Readiness:</td>
<td>10-Commercial</td>
</tr>
<tr>
<td>Reference Link:</td>
<td><a href="http://www.parorobots.com">http://www.parorobots.com</a></td>
</tr>
</tbody>
</table>

**Description:**

This robotic system in the shape of a baby seal is used as a variant of pet-therapy in institutional care of older adults with dementia. Caretakers facilitate the system to interact with their clients. The main benefits of the system were studied to be an influence on the emotional regulation of patients and enhanced social interaction.

http://www.japantrendshop.com/DE-paro-roboter-therapie-robbe-p-144.html

**Application Domain:**

kognitive/emotionale Unterstützung  
Cognitive / Emotional Support

**AAL Robot Features:**

<table>
<thead>
<tr>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>assists activities of daily living/working</td>
</tr>
<tr>
<td>specific design for older adults</td>
</tr>
<tr>
<td>no specific design, but seems usable by seniors</td>
</tr>
<tr>
<td>improves/maintains independent living</td>
</tr>
<tr>
<td>is capable of visible motion</td>
</tr>
<tr>
<td>has sensors and actuators</td>
</tr>
<tr>
<td>makes sensor/knowledge-based decisions</td>
</tr>
<tr>
<td>motion in two or more axes</td>
</tr>
</tbody>
</table>

Company: AIST  
Country: JP  
Year: 2001  
est. Price: 5000 USD

Target Group: older adults  
Research Project: |
Technology Readiness: 10-Commercial  
Reference Link: http://www.parorobots.com

http://www.japantrendshop.com/DE-paro-roboter-therapie-robbe-p-144.html
Type: Companion Robot

Company: CMU
Research Project: 
Target Group: older adults
Technology Readiness: 3-Analytical and experimental critical function and/or characteristic
Reference Link: https://www.ri.cmu.edu/research_project_detail.html?project_id=347&menu_id=261

Description:
Designed to interact with and guide people in assisted living facilities.

Application Domain:
Cognitive / Emotional Support
Communication & Social Support
Fetch & Carry

AAL Robot Features:
☒ assists activities of daily living/working
☒ specific design for older adults
☐ no specific design, but seems usable by seniors
☒ improves/maintains independent living

☒ is capable of visible motion
☒ has sensors and actuators
☒ makes sensor/knowledge-based decisions
☒ motion in two or more axes

http://www.cmu.edu/PR/releases05/051212_aging.html
Type: Emotional Robot

Primo Puel

Company: unknown
Research Project:
Target Group: general public
Technology Readiness: 10-Commercial
Reference Link: [http://news.bbc.co.uk/2/hi/programmes/this_world/golden_years/4436633.stm](http://news.bbc.co.uk/2/hi/programmes/this_world/golden_years/4436633.stm)

**Description:**

interactive doll that talks, giggles and asks for hugs.

**Application Domain:**

Cognitive / Emotional Support
Entertainment

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- motion in two or more axes

Company: 10-Commercial
Technology Readiness: 10-Commercial
Target Group: general public
Research Project:
Country: JP
Year: 2000
est. Price: 70 €

Reference Link: [http://news.bbc.co.uk/2/hi/programmes/this_world/golden_years/4436633.stm](http://news.bbc.co.uk/2/hi/programmes/this_world/golden_years/4436633.stm)
Type: Robotic Mobility Aid

Description:
A patient bed that splits in two parts: one part can detach and transform into a wheelchair. No information found whether the wheelchair is robotic when moving. From the description it is not clear what exactly is "robotic" about the bed, because it seems to be controlled by a nurse/caregiver.

Application Domain:
Mobilität
Physische Unterstützung
Mobility Support

AAL Robot Features:
- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- ☐ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ☐ makes sensor/knowledge-based decisions
- ☐ motion in two or more axes

Company: Panasonic
Research Project: Resyone
Target Group: Older adults
Technology Readiness: 10-Commercial

Country: JP
Year: 2014
Est. Price: 8400 €
ReWalk is a wearable robotic exoskeleton that provides powered hip and knee motion to enable individuals with spinal cord injury (SCI) to stand upright, walk, turn, and climb and descend stairs*. ReWalk is the only FDA cleared exoskeleton for rehabilitation and personal use in the United States.

*Stair function not currently available in US

ReWalk Robotics

Company: ReWalk Robotics

Country: US

Research Project:

Year: 2014

Target Group: impaired people

est. Price: USD 69500

Technology Readiness: 10-Commercial

Reference Link: rewalk.com

Description:

ReWalk is a wearable robotic exoskeleton that provides powered hip and knee motion to enable individuals with spinal cord injury (SCI) to stand upright, walk, turn, and climb and descend stairs*. ReWalk is the only FDA cleared exoskeleton for rehabilitation and personal use in the United States.

*Stair function not currently available in US

Application Domain:

Mobility Support

AAL Robot Features:

☒ assists activities of daily living/working
☐ specific design for older adults
☐ no specific design, but seems usable by seniors
☒ improves/maintains independent living

☒ is capable of visible motion
☒ has sensors and actuators
☐ makes sensor/knowledge-based decisions
☒ motion in two or more axes

http://rewalk.com/rewalk-personal/
**Type:** Robotic Mobility Aid

<table>
<thead>
<tr>
<th>Company:</th>
<th>Riken Bio-Mimetic Control Center</th>
<th>Country:</th>
<th>JP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td></td>
<td>Year:</td>
<td>2008</td>
</tr>
<tr>
<td>Target Group:</td>
<td>care staff</td>
<td>est. Price:</td>
<td>unknown</td>
</tr>
</tbody>
</table>

**Technology Readiness:** 6-Model or prototype demonstration in a relevant environment

**Reference Link:** [http://rtc.nagoya.riken.jp/RI-MAN/index_us.html](http://rtc.nagoya.riken.jp/RI-MAN/index_us.html)

**Description:**
Platform to support lifting of patients in a hospital or at home

![Robot Assisting Patient](http://rtc.nagoya.riken.jp/RI-MAN/index_us.html)

**Application Domain:**
Physische Unterstützung
Fetch & Carry
Mobility Support

**AAL Robot Features:**
- ✖ assists activities of daily living/working
- specific design for older adults
- ✖ no specific design, but seems usable by seniors
- ✖ improves/maintains independent living
- ✖ is capable of visible motion
- ✖ has sensors and actuators
- ✖ makes sensor/knowledge-based decisions
- ✖ motion in two or more axes
Type: Robotic Mobility Aid

Company: RIKEN
Research Project: 
Target Group: care staff

Description:
Successor of RIBAII, the main target group is care staff, secondary users are older people although it is not immediately clear which benefit they would have from such a system. It is used to transport patients inside care facilities from bed to toilet / wheelchair etc.

Application Domain:
Fetch & Carry
Mobility Support

AAL Robot Features:
- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

www.riken.jp/en

Country: JP
Year: 2014
est. Price: n.a
Robotic Wheelchair

**Type:** Robotic Mobility Aid

<table>
<thead>
<tr>
<th>Company:</th>
<th>Chiba Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project:</td>
<td></td>
</tr>
<tr>
<td>Target Group:</td>
<td>impaired people</td>
</tr>
<tr>
<td>Technology Readiness:</td>
<td>3-Analytical and experimental critical function and/or characteristic</td>
</tr>
<tr>
<td>Country:</td>
<td>JP</td>
</tr>
<tr>
<td>Year:</td>
<td>2012</td>
</tr>
<tr>
<td>est. Price:</td>
<td>unknown</td>
</tr>
</tbody>
</table>

**Description:**

robotic wheelchair that is able to climb steps to enhance the mobility of the user

**Application Domain:**

Mobility Support

**AAL Robot Features:**

- ✗ assists activities of daily living/working
- ✗ specific design for older adults
- ✗ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living

- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

Type: Telepresence Robot

**RP-VITA**

| Company: | InTouchHealth |
| Research Project: |  |
| Target Group: | care staff |
| Technology Readiness: | 9-Actual system proven through successful mission operations |

**Description:**

A remote presence robot for doctors who can virtually visit patients at their bedside. The system has been piloted in a number of hospitals in Europe, Canada and US and reached FDA-clearance.

**Application Domain:**

soziale Unterstützung, Kommunikation
Communication & Social Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes
Rufus Running Companion

**Type:** Rehabilitation Robot

**Company:** runfun GmbH

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 9-Actual system proven through successful mission operations


**Description:**
RUFUS is a robotic device developed to support runners. It is an electrically driven vehicle with an automatic cruise control. RUFUS Basic is your personal running coach and RUFUS Pro is your professional coaching assistant.

**Application Domain:** Rehabilitation Support

**AAL Robot Features:**

- ✔ assists activities of daily living/working
- ✔ specific design for older adults
- ✔ no specific design, but seems usable by seniors
- ✔ improves/maintains independent living
- ✔ is capable of visible motion
- ✔ has sensors and actuators
- ✔ makes sensor/knowledge-based decisions
- ✔ motion in two or more axes

---

potenziaAL
**Type:** Household Robot

<table>
<thead>
<tr>
<th>Company</th>
<th>Moneual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Project</td>
<td></td>
</tr>
<tr>
<td>Target Group</td>
<td>general public</td>
</tr>
<tr>
<td>Technology Readiness</td>
<td>10-Commercial</td>
</tr>
<tr>
<td>Reference Link</td>
<td><a href="http://moneualusa.com">http://moneualusa.com</a></td>
</tr>
</tbody>
</table>

**Description:**
Vacuum cleaning robot that also mops the floor.

http://moneualusa.com

<table>
<thead>
<tr>
<th>Application Domain</th>
<th>AAL Robot Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housekeeping Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✗ assists activities of daily living/working</td>
</tr>
<tr>
<td></td>
<td>☐ specific design for older adults</td>
</tr>
<tr>
<td></td>
<td>☐ no specific design, but seems usable by seniors</td>
</tr>
<tr>
<td></td>
<td>✗ improves/maintains independent living</td>
</tr>
<tr>
<td></td>
<td>✗ is capable of visible motion</td>
</tr>
<tr>
<td></td>
<td>✗ has sensors and actuators</td>
</tr>
<tr>
<td></td>
<td>✗ makes sensor/knowledge-based decisions</td>
</tr>
<tr>
<td></td>
<td>✗ motion in two or more axes</td>
</tr>
</tbody>
</table>

Country: US  
Year: 2014  
est. Price: 379USD
Type: Household Robot

Company: iRobot
Research Project:
Target Group: general public
Technology Readiness: 10-Commercial
Reference Link: http://www.irobot.at/Shop/Robots/Scooba-450

Country: US
Year: 2006
est. Price: 300-500€

Description:
floor cleaning robot

Application Domain:
Haushaltstätigkeiten
Cleaning
Housekeeping Support

AAL Robot Features:
✓ assists activities of daily living/working
☐ specific design for older adults
☐ no specific design, but seems usable by seniors
✓ improves/maintains independent living

✓ is capable of visible motion
✓ has sensors and actuators
✓ makes sensor/knowledge-based decisions
✓ motion in two or more axes
Robotic Mobility Aid

**Type:** Robotic Mobility Aid

**Stairmax Selbstfahrer**

- **Company:** Lehner-Lifttechnik
- **Research Project:**
- **Target Group:** impaired people
- **Technology Readiness:** 10-Commercial

**Description:**

System that supports stairclimbing, also for individuals on their own. The wheelchair is attached to a battery driven crawler type undercarriage.

**Application Domain:**

- Mobility Support

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes

**Company:** Lehner-Lifttechnik

**Country:** AT

**Year:** 2007

**est. Price:** 2300 €

**Company:** Lehner-Lifttechnik

**Country:** AT

**Year:** 2007

**est. Price:** 2300 €

**Company:** Lehner-Lifttechnik

**Country:** AT

**Year:** 2007

**est. Price:** 2300 €
Type: Robotic Mobility Aid

**Stairwalker**

**Company:** ThyssenKrupp  
**Country:** GER  
**Year:** 2013  
**Target Group:** older adults  
**Technology Readiness:** 10-Commercial  

**Description:**
The StairWalker provides support in the user's back for going upstairs or in front to lean on while going down. It is a daily exercise to keep the user fit and independent. The product was discontinued in 2014.

**Application Domain:** Mobility Support  

**AAL Robot Features:**
- ✔ assists activities of daily living/working  
- ✔ specific design for older adults  
- ☐ no specific design, but seems usable by seniors  
- ✔ improves/maintains independent living  
- ✔ is capable of visible motion  
- ✔ has sensors and actuators  
- ☐ makes sensor/knowledge-based decisions  
- ☐ motion in two or more axes

http://www.thyssenkrupp-access-solutions.com

potenziAAL
### Robotic Mobility Aid

#### Type:
Robotic Mobility Aid

#### Description:
Scooter-like mobility aid, supports standing up and sitting down, moving around in standing position, for indoor use only.

#### Application Domain:
Mobility Support

#### AAL Robot Features:
- **×** assists activities of daily living/working
- **☐** specific design for older adults
- **☐** no specific design, but seems usable by seniors
- **×** improves/maintains independent living
- **×** is capable of visible motion
- **×** has sensors and actuators
- **×** makes sensor/knowledge-based decisions
- **×** motion in two or more axes

#### Company:
Matia

#### Research Project:

#### Target Group:
impaired people

#### Technology Readiness:
10-Commercial

#### Reference Link:
http://www.matiarobotics.com

#### Country:
TR

#### Year:
2012

#### est. Price:
18000 USD
Type: Robotic Mobility Aid

Company: Panasonic

Research Project: 7-System prototype demonstration in an operational environment

Target Group: older adults

Technology Readiness: estimated to be below 1m yen (7k€)

Reference Link: http://ajw.asahi.com/article/business/AJ201409250035

Description:

Users of Panasonic’s new device will wear a special vest-like sling that attaches to the robot’s arm. The arm moves in coordination with the user’s physical movements to aid such motions as standing and sitting. To move about, the user places their arms on a handle-like support device that helps them guide the robot.

Application Domain: Mobility Support

AAL Robot Features:

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes
**Vortex OV 3300**

**Type:** Household Robot

**Company:** Zodiac Pool Care

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 10-Commercial

**Reference Link:** [http://www.zodiac-poolcare.co.uk](http://www.zodiac-poolcare.co.uk)

**Description:**

Pool cleaning system that operates autonomously and cleans the whole pool including the walls.

**Application Domain:**

Housekeeping Support

**AAL Robot Features:**

- ✗ assists activities of daily living/working
- ❑ specific design for older adults
- ❑ no specific design, but seems usable by seniors
- ✗ improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

**Country:** FR

**Year:** 2015

**est. Price:** 866 €
**WheeMe 2.0**

**Type:** Entertainment Robot

**Company:** DreamBots

**Research Project:**

**Target Group:** general public

**Technology Readiness:** 10-Commercial

**Reference Link:** [http://www.wheeme.com](http://www.wheeme.com)

**Description:**

Massage and Relaxation Robot

WheeMe is a palm-sized robot that gently massages and caresses as it moves slowly across your body. Using unique sensor technology, WheeMe automatically steers itself over your body with very little chance of falling off or losing its grip. As it moves, WheeMe’s four small wheels and the rotor finger gently press and caress providing a delightful sense of relaxation and calm.

**Application Domain:**

Entertainment

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living
- ✗ is capable of visible motion
- ✗ has sensors and actuators
- ✗ makes sensor/knowledge-based decisions
- ✗ motion in two or more axes

http://www.myrobotcenter.at/de_at/gadgets/massageroboter/dreambots-wheeme-v2-0#reviews-section
Companion Robot
Zora

**Type:** Companion Robot

**Company:** QBMT

**Research Project:**

**Target Group:** care staff

**Technology Readiness:** 10-Commercial

**Reference Link:** http://zorarobotics.be

**Country:** BE

**Year:** 2014

**Estimated Price:** 15000 €

**Description:**

Zora is a software solution on the mobile humanoid platform Nao, that supports older users at residential facilities and patients in hospitals. Zora’s services include reminders, motivation and guidance for physical training and communication.

**Application Domain:**

Cognitive / Emotional Support
Communication & Social Support
Entertainment

**AAL Robot Features:**

- assists activities of daily living/working
- specific design for older adults
- no specific design, but seems usable by seniors
- improves/maintains independent living

- is capable of visible motion
- has sensors and actuators
- makes sensor/knowledge-based decisions
- motion in two or more axes