



**RESEARCH GRANT FROM THE EUROPEAN COMMISSION ACHIEVED BY THE
DEPARTMENT OF COMPUTER SCIENCE OF THE UNIVERSITY OF CYPRUS**

**Participates in the innovative project “Miraculous-Life for Elderly Independent
Living”**

A robot that is 'human' enough to communicate with, could be a great support partner for older people living alone. To ascertain this, the European Commission launched the project **“Miraculous-Life for Independent Living of Elder Citizens”**. The main objective of the project is to develop and test a Virtual Support Partner which will attend to the daily activities and safety needs of the elderly citizens (65+) in their everyday lives.

The Department of Computer Science of the University of Cyprus, in cooperation with the med-sized company CITARD Ltd, have recently secured participation in the new European research project *Miraculous-Life*, with a total funding of €3.200.000. The amount of funding attributed to the Cypriot team for its participation in this project amounts to €730.000.

Nine companies and research organizations from five European countries will develop and test the technology, in a consortium headed by the Austrian Institute of Technology (AIT). At the heart of their work is an avatar interface: an electronic and digital persona that older people can connect with. When integrated in a robot, this promises to make daily life a lot easier for senior citizens. This consortium brings together a wide range of researchers, including members of the academic community, established technology vendors, innovative media and end-user organizations.

An interface based on Avatar

A crucial asset of the Virtual Support Partner (VSP) will be its capacity for behavioral and emotional understanding. Thanks to its Avatar-based interface, the VSP is able to fuse facial expressions, intonation, gestures and other contextual information of the user's environment to provide empathic responses and services. As such, it provides ICT services to support daily activities, in a human-like way. This in turn stimulates and motivates older people to stay active. In the longer term, the system will provide practical, psychological and social benefits enabling and motivating the elderly to

remain active at home and thus prolonging their independence and improving their wellbeing.

"Based on the recognition of the emotional state of the user and the interpretation of their behaviour in the environmental context, we will develop and evaluate a new dialogue system which is using realistic 3D rendering of human-like avatars and which is emotionally responsive" says Andreas Hochgatterer, project leader from the AIT Austrian Institute of Technology..

To find out if the concept lives up to its promises, up to 100 elderly people in two test-bed locations in Switzerland and the Netherlands, will try out the system over a six-month period.

The Miraculous-Life project is co-funded by the European Commission under the 7th Framework Programme. The partners of the research project are:

- AIT: Austrian Institute of Technology (Austria)
- University of Geneva (Switzerland)
- University of Cyprus (Cyprus)
- ORBIS Medical Centre (The Netherlands)
- Fraunhofer: Research Promotion Organization (Germany)
- Noldus: Information Technology (Netherlands)
- Citard: Computer Services (Cyprus)
- Zoobe: Animation via messages (Germany)
- MRPS: Residential Care Organization (Switzerland)

For more information: www.miraculous-life.eu