

Neural Prosthesis Seminar “Quality of Life Technology”

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Case Western Reserve University



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Abstract:

We define Quality of Life Technology (QoLT) as intelligent systems that augment body and mind for self-determination for older adults and people with disabilities. QoLT systems take many forms: they could be a device that a person carries, a mobile system that accompanies a person, or a technology-embedded environment in which a person lives. While QoLT R&D yields intelligent systems, it is a departure from traditional robotics research aimed at “more intelligent”, “more autonomous” systems for which reducing human involvement is an implicit goal. In contrast, QoLT systems work in the daily environment with a person and for the person; it is not just an artificial “system”, but person-system symbiosis in which the person and the artifact components are mutually dependent and work together. QoLT is the first serious attempt to make intelligent systems work with people in the most natural, unstructured, changing everyday-life environments. In addition to the techniques for robust perception, safe mobility and manipulation, and dynamic interface, we must develop understanding of how people act and behave in everyday life - or science of everyday living, a domain that science has not yet targeted. The presentation discusses the challenges, opportunities and progress of QoLT.

For more information, please contact Cathy Walker at (216) 707-6490.

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