Call for Submissions

A smart home can be considered an augmented environment capable of utilizing embedded computers, information appliances, micro/nano systems, and multi-modal sensors to offer elderly unprecedented quality of life. Applications, such as health telematics, can be used in the home environment to radically transform the way health-related services are conceived and delivered. Significant research is underway to enable elders and people with special needs to use smart assistive technology and smart homes to more easily perform activities of daily living, continue social participation, engage in entertainment and leisure activities, and to enjoy living independently.

Today, networks, microprocessors, memory chips, smart sensors and actuators are faster, cheaper, more intelligent, and smaller than ever. Current advances in such enabling technologies, coupled with the need to transform the health care delivery system in rural areas, are giving rise to novel applications and services for improving the quality of life for all. ICOST 2008 invites computer science and engineering researchers and practitioners, as well as domain experts in health sciences, rehabilitation and gerontology, to present the latest studies, findings and technical solutions in the area of smart homes, health telematics, and other assistive technologies. Topics of interest include, but are not limited to:

- Intelligent Environments with Emphasis on Smart Homes
- Personal Medical Data Collection and Processing (Health Vaults)
- Devices, Systems and Algorithms for Vision/Hearing/Cognitive/Communication Impairments
- Home Networks and Residential Gateways
- Human-Machine Interface and Ambient Intelligence
- Home Health Monitoring and Intervention
- Wearable Sensors/Integrated Micro/Nano Systems
- Tele-Assistance and Tele-Rehabilitation
- Assistive and Rehabilitative Robotics and Smart Wheelchairs
- Social/Privacy/Security Issues
- Context Awareness/Autonomous Computing
- Middleware Support for Smart Homes and Health Telematic Services
- Modeling of Physical and Conceptual Information in Intelligent Environments
- Assessment and Evaluation of Intelligent Environments
- Real World Deployments and Experiences in Smart Homes, Hospitals, and Living Communities
- Elder Perspectives on Smart Home Technologies
- Assistive Technology to Improve Quality of Life for Older Adults and their Caregivers
- Social Science and Health Care Technology

SPECIFIC THEME

Each year ICOST has a specific flavor. ICOST2003 focused on usability. The theme was "Independent Living for Persons with Disabilities and Elderly People." The theme for ICOST2004 was "Towards a Human-Friendly Assistive Environment." ICOST2005 theme was "From Smart Homes to Smart Care." ICOST2006 theme was "Smart Homes and Beyond." The theme of ICOST2007 was "Pervasive Computing Perspectives for Quality of Life Enhancement." ICOST2008 theme will be "Gerontechnology: Enhancing the Quality of Life for Rural Elders." This focuses on promoting pervasive computing in extending the quality of life in rural areas.

SUBMISSION PROCEDURE

- **Technical Papers**: Papers must not be previously published or under submission elsewhere. Papers should be written in English, not exceeding 8 printed pages and must adhere to the format specified in the online submission web page. All accepted technical papers will be published in a book as in the past.
- **Abstracts & Posters**: Abstracts reporting on completed or ongoing studies on the use or impact of smart homes and health telematics will be included and presented in the conference program. Abstracts must not exceed one page in length and should include a summary of the study results. Abstracts will be published separately and distributed to the conference delegates. Poster submission should follow the same format as Abstract submission but must indicate the submission is intended as a Poster (by marking the appropriate check box in the online submission form).
- **Demonstrations**: Technical demos are encouraged. A two-page description of the demo and the space and infrastructure requirements needed should be sent via email (not web submission) to the Program Co-Chairs.
- **All submissions** must be sent electronically through the conference web site. A double-blind review process will be established. Papers should not include author names or their institutions. More specific instructions on format and submission procedures will be posted soon on the conference web site.

IMPORTANT DATES

- All submissions (technical papers, abstracts & posters) via the conference web: 29 February 2008
- Notification of acceptance for abstracts & posters: 14 March 2008
- Notification of acceptance for full papers: 31 March 2008
- Camera-ready copy for full paper: 18 April 2008
- Conference: June 28 – July 2, 2008

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FOR MORE INFORMATION - Email Professor Carl Chang, ICOST 2008 General Chair: chang@cs.iastate.edu