

**Title of the session:**

HSI for monitoring elders and disabled at home

**Organizer:**

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**Description and rationale for organizing the session**

Elder and disable home care is a unique and challenging task. The considered problem is a very complex one since person activities and physiology are extremely varied and unscripted. There are many projects focusing on developing innovative, high potential technologies for elder and disabled homecare applications. As a result many approaches are adopted. They are integrated, context-aware and very often adaptive. They constitute autonomous systems or form an intermediary layer between elder or disabled and their caregiver. The main task of the proposed session is to present recent achievements in this fast developing area.

**Topics:**

- modalities used for monitoring persons at home,
- pervasive monitoring of disabled persons,
- hsi for disabled,
- health monitoring at home,
- monitoring of activity,
- preventing elder and disabled persons from exclusion.

**Tentative titles:**

1. Piotr Augustyniak, Complementary application of house-embedded and wearable infrastructures for health monitoring.
2. A. Bujnowski, et al. Estimation of activity parameters by means of domestic energy consumption.
3. T. Kocejko, et al. Authentication for elders and disabled using eye tracking.
4. T. Lewandowski, P. Augustyniak, The system of a touchfree personal computer navigation by using the information on the human eye movements.
5. J. Rumiński, et al, Color transformation methods for dichromats.
6. M. Smoleń, Preliminary studies of the selected motion registrations for patients' monitoring applications.
7. J. Wtorek, et al, A 24 hour monitoring of ECG and breathing by means of sensor mote.

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