

Workshop on:

(NOTION) Human Behaviour Monitoring, Interpretation and Understanding

Organisers:

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Topics & Motivation

Topics of interest include, but are not limited to:

1. Ambient assisted living
2. Activity and action recognition
3. Affective computing
4. Ambient intelligence for healthcare
5. Ambient intelligence services
6. Behaviour analysis for alerts
7. Behavioural grouping
8. Benchmarking, databases and simulation tools
9. Context-awareness and semantic modelling
10. Emotion recognition
11. Fall detection
12. Human behavioural analysis
13. Hybrid intelligent systems for ubiquitous computing,
14. Intelligent Living Environments
15. Mobile social networks
16. Semantic analysis
17. Sensing and reasoning technology
18. Sensing technologies and measurements
19. Signal fusion in ubiquitous environments
20. Smart coaching systems
21. Smart homes
22. Social sensor networks applications for cognitive and physical health
23. Social activity recognition

24. User mobility modelling and location tracking
25. User-centric computing
26. Video-based human behaviour understanding
27. Vision-based system
28. Wireless sensor network applications

About the Workshop

The health care systems in Europe and the most developed countries in the world are faced with challenging transition processes due to demographic change. The increase of the elderly population and the expectation of life brings about serious risks, with some profound socio and economic impact on our societies. To reduce the burden of social care, integration of existing unobtrusive, easy-to-use and transparent monitoring systems are proven to be an acceptable solution by the elderly and their carers. The ultimate goal of research is to replace the carer with a virtual intelligent carer capable of interpretation and understanding of their activities.

Many technological advances in monitoring systems are developed. Ambient Intelligence have been adopted as a term referring to environments that are sensitive and responsive to the presence of people and it is a candidate to become the next wave of computing. Indeed, this novel computing approach is aimed to extend ubiquitous vision by incorporating intrinsic intelligence in pervasive systems. This idea enables the study, design and development of embodiments for smart environments that not only react to human events through sensing, interpretation and service provision, but also learn and adapt their operation and services to the users over time. These embodiments employ contextual information when available, and offer unobtrusive and intuitive interfaces to their users.

The aim of this workshop is to encompass valuable research and achievement in the monitoring, interpretation and understanding of human behaviour through smart technologies. There are many readily available monitoring systems to monitor people in their own home environment. However, there are challenges ahead with respect to interpretation and understanding of the sensory data and linked that with the actual activity representing a specific behaviour.

Workshop Goals

The workshop aims to attract researchers who are involved in research related to human activities monitoring and recognition. The participants will have the opportunity to present their research and discuss with fellow researchers the state of the art solutions. Novel and innovative contribution relate to the topics of the workshop mentions above are welcomed.

Important Dates

This Workshop will be part of the 10th International Conference on Pervasive Technologies Related to Assistive Environments ([PETRA](#)) to be held on the Island of Rhodes, Greece from 21-23 June 2017.

- Paper Submission: March 3rd, 2017
- Paper Notification: March 17th, 2017
- Camera-Ready Paper: March 31st, 2017

Paper submissions should follow PETRA'17 general guidelines found at www.petrae.org/submissions.html