

Preface

The medical systems that the Governments operate to fulfil the healthcare requirements of the Society are always looking to offer higher quality at the lowest cost. It seems that the current systems are unsustainable as the rate of senior society members to the active employees is increasing and the curve of required medicine cost for the last 10 years of people’s life is more than the corresponding medical cost used for the rest of their life. The question is then whether we can “flatter” or smoothen the lifetime cost curve for the provided healthcare services.

This is a big challenge for AI as well as the always evolving digital technology. How can we be proactive rather than post-active in order to early detect, make diseases prognosis and give the right assistive medical support on time? Answer to this question can offer the exploitation of AI methods in combination with the sensor networks technology and the new technology devices like smart phones, tablets, digital TVs, web cameras and all the smart gadgets that appear in the market.

Thus, we organize the workshop on Artificial Intelligence and Assistive Medicine, hoping to contribute in answering this question by collecting works about AI-related techniques in medicine. The papers accepted for this one-day workshop give special emphasis in:

- Ubiquitous real-time assistive healthcare
- Ambient assisted living
- Wearable and/or unobtrusive smart healthcare systems
- Multi-Agent architectures for patient monitoring and early diagnosis
- Fusion and interpretation of multimodal medical data and events
- Medical ontology modelling and evolution
- Semantically diagnosis modelling
- Reasoning with the uncertainty of medical data/knowledge
- Mining on medical data/knowledge
- Patient centric and evidence based decision support systems

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