## **Call for Papers**

## 7<sup>th</sup> International Conference on Information Technology in Biomedicine Special Session on Medical Data Science

Medicine and Data Science are revolutionary and reapidly evolving disciplines presenting togather the most significant potential for the future of helthcare. The new technologies, mobile devices, sensors, AI-powered applications, they all give the new meaning to optimization of clinical processes especially in times of demographic changes leading to society aging. The machine learning algorithms can be used to process large volumes of various, health-related data and draw a complex map of ones physical and mental condition, provide personalized information and experience or suggest prevention programmes and therapeutic interventions resulting in an active and healthy lifestyle.

The ITiB Special Session on Medical Data Scince aims at attracting original manuscripts reporting on scientific approaches, especially pattern recognition and machine learning based algorithms for interpretation of health-related, sensory data and ICT solutions towards promoting active and healthy lifestyle. More specifically, the thematic scope of the special session includes, but is not limited to, the following aspects:

- pattern recognition and machine learning algorithms for interpretation of health-related data,
- sensor-based physical activity assessment,
- sensor-based cognitive activity assessment,
- sensor-based emotion recognition,
- sensor-based therapy assistance,
- multimodal sensory data interpretation,
- automatic gesture and gait analysis,
- software architectures for medical data processing and interpretation,
- sensory systems and data analysis towards Active and Assisted Living in aging society,
- IT and ICT-based personalized intervention programmes,
- ethical, legal and social implications of medical data science.

## **ITiB Special Session on Medical Data Science Organizers:**

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