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Innovations in healthcare and medicine editorial

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Innovations in Healthcare and Medicine editorial

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Abstract

This special issue editorial begins with a brief discussion on the current trends of innovations in healthcare and medicine driven by the evolution of sensing devices as well as the information processing techniques, and the social media revolution. This discussion aims to set the stage for the actual papers accepted for the special issue which are extensions of the papers presented at the InMed 2014 conference held in San Sebastian, Spain, in July 2014.

1. Introduction

Computer science, information communication, and information processing are major driving forces for innovation in Healthcare and Medicine. A data processing pipeline starts with the data capture methods, ranging from automated/autonomous biochemical and physiological sensing devices up to manual filling of medical records. Across all the healthcare systems, data storage and data communication infrastructure are critical for the appropriate exploitation of the data, which besides its use by the healthcare provider can be even shared through social systems¹. Moreover, intelligent data processing helps to improve diagnosis, prognosis, and alarm detection.

Data collection. There is a continuous improvement in sensing devices that produce information of medical value. New sensors are efficient, highly accurate, and with low power consumption, weight, that can be integrated into wearable systems for applications such as continuous activity monitoring [15]. The limits of sensing devices are reaching science fiction boundaries, for instance, graphene applications include the high resolution monitoring of neuronal activity by intrusive implants over the brain cortex Park et al. [17]. Additionally, Electronic Health Records (EHR) in their diverse standards and implementations have become a huge source of information with promises of improved care quality,

¹<https://www.patientslikeme.com>

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