Data Format for Storing ANT Sensors Data



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Medical treatment of sudden and especially chronic diseases has become more expensive. People suffering from a variety of diseases had been traditionally treated in hospitals for a long time. Fortunately, the current situation has been changing also thanks to relatively cheap body sensors and development of systems for home treatment. It brings inconsiderable cost savings and improves patients' comfort. On the other hand, it puts demands on the used technical infrastructure and home treatment system developers who must solve integration of different systems. A crucial point is a definition of unified data formats facilitating transfer and storage of data to/in remote databases. There are standards and APIs such as Zigbee, Bluetooth low energy or ANT+ that define a protocol for data transfer. However, they do not define a suitable format for long term data storing. In this paper, data coming from ANT+ sensors have been studied and metadata related to all kinds of body sensors and raw data and metadata specific to individual sensors have been defined. Then a framework organizing data and metadata obtained from ANT+ sensors into an open and general data format suitable for long term storage of sensor data is introduced. Finally, a sample use-case showing the transfer of data from a sensor into a data storage is presented.

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