Advances in Data-Analysis based Mobile Health Applications

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Abstract. “Big data” is endowing the traditional healthcare with mobility, intelligence and convenience, which has given birth to “Mobile Health”. In such a mobile health environment, tasks like health monitoring of patients, intelligent diagnosis and information push, etc., can be automatically and rapidly accomplished by analyzing a large number of data collected from various mobile devices. However, such mobile applications still face numerous challenges due to the voluminous data and complex procedures.

With the rapid development of novel electronic and computing technologies, wearable devices have been paid more and more attention in the field of mobile health, which makes it possible to monitor physiological indexes of human bodies in real-time applications. The report mainly focuses on several works of our research group in the field of mobile health applications, especially on physical health monitoring of primary and secondary school students in Beijing China, by investigating technology combination of wearable sensors and big data analysis.

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