embedded on a wheelchair

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ABSTRACT

Ubiquitous Computing has the main goal of building computing systems that support and facilitate the daily lives of users, but being the least intrusive possible. There are many technological advances reported in literature, but the current scenario is still far away from an everyday life fulfilled with ubiquitous systems. The main objective of this work is to present a pervasive biomedical assistive environment for the elderly, with a wheelchair as a smart object. The wheelchair includes embedded sensors to measure physiological parameters such as heart rate and respiratory rate, mechanical quantities such acceleration. A LF RFID reader is associated with in order to assure the wheelchair user identification and wheelchair trajectory estimation considering different RFID tags that are distributed on the [illegible] the implemented RFID system accompanying persons of the wheelchair's user

distribution of the system by the various entities in the environment, which are users (elderly, watcher, and clinic), objects (e.g., the wheelchair) and situated displays.

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Index Terms

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