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Review Paper on Radio Sensors

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Abstract: The creation and widespread use of human-centric applications, such as health monitoring, assisted living, etc., are made possible by recognizing human actions in daily life. To recognize user behaviors at an aggregator, traditional activity recognition approaches frequently are used on physical sensors (camera, accelerometer, gyroscope, etc.) that continuously collect sensor data. Although standard activity identification techniques have been shown to be useful in earlier research, they are not without privacy, energy, and implementation cost issues. Recent years have seen the development of a brand-new activity recognition method that makes use of wireless radio's body attenuation and/or channel fading. Compared to conventional activity recognition techniques, radio-based techniques make use of wireless transceivers as infrastructure and take use of radio communication features to achieve high Accurate recognition, lower energy costs, and protection of user privacy. ZigBee radio-based activity recognition, Wi-Fi radio-based activity recognition, RFID radio-based approaches are divided in this work. Each category's body of work is introduced and thoroughly reviewed. Then, we contrast a few example techniques to demonstrate their benefits and drawbacks. Finally, we highlight some potential future avenues for this new study field.

Keywords: Radio, Sensors

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