Human Activity Recognition and Indoor Localization using Inertial Measurement Unit

Mots clés : Array

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- Domaine scientifique principal: Sciences et technologies de l'information et de la communication

Résumé du projet de recherche (Langue 1)

The aim of this work is twofold: the first is to propose a lightweight approach to identify current human activity and the second is to propose an indoor localization system based on signal from Inertial Measurement Unit (IMU). The approach is intended to work on smartwatch or wristband, and able to distinguish between several activities: walking, running, sitting, light sleeping, deep sleeping, and playing basket, ping pong, etc. The proposed system must be adaptive and interactive by allowing the user to correct false classifications.