World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:11, No:12, 2017

Activity Data Analysis for Status Classification Using Fitness Trackers

Authors : Rock-Hyun Choi, Won-Seok Kang, Chang-Sik Son

Abstract : Physical activity is important for healthy living. Recently wearable devices which motivate physical activity are quickly developing, and become cheaper and more comfortable. In particular, fitness trackers provide a variety of information and need to provide well-analyzed, and user-friendly results. In this study, frequency analysis was performed to classify various data sets of Fitbit into simple activity status. The data from Fitbit cloud server consists of 263 subjects who were healthy factory and office workers in Korea from March 7th to April 30th, 2016. In the results, we found assumptions of activity state classification seem to be sufficient and reasonable.

Keywords : activity status, fitness tracker, heart rate, steps
Conference Title : ICCSIT 2017 : International Conference on Computer Science and Information Technology
Conference Location : Bangkok, Thailand
Conference Dates : December 18-19, 2017