Meng-Ying reading list

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1 What I have read.

In order to recognize physical/human activity, I explored the previous work about how to use wearable and non-wearable device to detect physical/human activity [8, 4, 1].There was widespread application for physical activity, so I also read the paper about how to analyze gait or posture [11, 5, 2] , how to use it in the field of rehabilitation [3], how to analyze the movement's quality [6, 7] and how to give the sensory feedback [9, 10].

References

[1] L. Bao and S. S. Intille. Activity recognition from user-annotated acceleration data. pages 1–17. Springer, 2004.

[2] M. Benocci, L. Rocchi, E. Farella, L. Chiari, and L. Benini. A wireless system for gait and posture analysis based on pressure insoles and inertial measurement units. In *Pervasive-Health*, pages 1–6. IEEE, 2009.

[3] K.-H. Chen, P.-C. Chen, K.-C. Liu, and C.-T. Chan. Wearable sensor-based rehabilitation exercise assessment for knee osteoarthritis. *Sensors*, 15(2):4193, 2015.

[4] Y. He and Y. Li. Physical activity recognition utilizing the built-in kinematic sensors of a smartphone. *IJDSN*, 2013, 2013.

[5] T. N. Hung and Y. S. Suh. Inertial sensor-based two feet motion tracking for gait analysis. *Sensors*, 13(5):5614, 2013.

[6] B. Kikhia, M. Gomez, L. L. Jimnez, J. Hallberg, N. Karvonen, and K. Synnes. Analyzing body movements within the laban effort framework using a single accelerometer. *Sensors*, 14(3):5725, 2014.

[7] H. M. Mentis and C. Johansson. Seeing movement qualities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '13, pages 3375–3384, New York, NY, USA, 2013. ACM.

[8] A. Muro-de-la Herran, B. Garcia-Zapirain, and A. Mendez-Zorrilla. Gait analysis methods: An overview of wearable and non-wearable systems, highlighting clinical applications. *Sensors*, 14(2):3362, 2014.

[9] C. B. Redd and S. J. M. Bamberg. A wireless sensory feedback system for real-time gait modification. In *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, pages 1507–1510, 2011.

[10] C. B. Redd and S. J. M. Bamberg. A Wireless Sensory Feedback Device for Real-Time Gait Feedback and Training. *IEEE-ASME Transactions on Mechatronics*, 17:425–433, 2012.

[11] T. Seel, J. Raisch, and T. Schauer. Imu-based joint angle measurement for gait analysis. *Sensors*, 14(4):6891, 2014.