

Internship in Wearable Technology and Physical Activity Research

Duration: 4–6 months (starting in spring 2027)

Background

Physical activity is essential for maintaining good physical and mental health. To better understand people's daily movement behaviour – such as sleeping, sitting, walking, and cycling – wearable sensors, such as activity monitors, are increasingly being used. Data from these sensors can be analysed using Human Activity Recognition (HAR) software, which automatically predicts which activities a person is performing.

During this internship, you will investigate how accurate and reliable HAR software actually is. You will contribute to a validation study in which software predictions are compared with video recordings of participants' actual activities. In doing so, you will contribute to improving the reliability of physical activity measurements in health research.

The internship will take place at the Department of Physiology, which is part of Medical Biosciences. You will join a research group focused on measuring and understanding healthy behaviour and physical activity in daily life.

What will you do?

You will contribute to the processing, analysis, and interpretation of accelerometer data by reviewing and coding video recordings of participants' activities and using this data to validate the reliability of existing HAR software. In addition, you will have the opportunity to develop your own HAR algorithm using the data collected in the study.

This internship offers a unique opportunity for students interested in data science, AI, and health behaviour to gain experience in an interdisciplinary research field. You will work at the intersection of data science, epidemiology, and health sciences, contributing to the improvement of digital measurement methods in healthcare.

Interested or have questions?

Please contact us at onderwijsintegratieve.fysiol@radboudumc.nl.