

Students wanted...

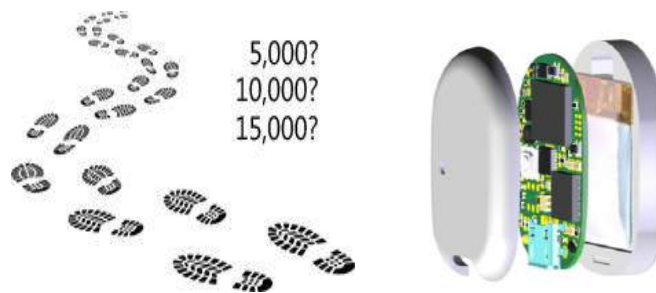


... as HiWi for Data Collection and Annotation

The Digital Sports Group needs a student assistant to assist with some data collection which are needed for ambient assisted living (AAL) and wearable applications. My area of interest within the group is using graphical models to accurately segment repetitive activities within 'in the wild' data. This will allow us to collect quantitative information, such as change of stride length over time, which could be helpful to sports training analysis and medical movement analysis.

Some of the research questions that we would like to answer with this dataset are:

- How much annotation is required to train models for accurate segmentation?
- How much effect does sensor placement have on algorithm accuracy?
- Are individualised models feasible and accurate?



Task Description:

- Collect, annotate and pre-process IMU-based activity data to answer the above questions

Time requirements:

- Blocks of 3 to 4 hours for data collection on campus, annotation not necessarily on campus.

Compensation:

- With Bachelor's degree: 10,00 Euro/Hour
- Without degree: 8,50 Euro/Hour

Prerequisites:

- Good understanding of scientific data collection, previous experience helpful
- Sound programming skills: Matlab
- Experience with microcontrollers and/or IMMU advantageous

Begin: February/March
2016

Contact: **Christine Martindale**
christine.f.martindale@fau.de
+49 9131 85-20159

Students wanted...



... as HiWi for Wearable Computing Workshop

The Digital Sports Group needs a student assistant to develop and Android based framework for a microcontroller based development kit.



Task Description:

- Develop a framework for an app that streams data from an IMMU to a phone via BTLE, with documentation
- Trouble shoot current errors when sampling higher than 100 Hz and find a solution (compression, buffering)
- Possible design of hardware casing

Time requirements:

- Up to 100 Hours, times and dates negotiable

Compensation:

- With Bachelor's degree: 10,00 Euro/Hour
- Without degree: 8,50 Euro/Hour

Prerequisites:

- Sound programming skills
- Good knowledge of C, knowledge of android development advantageous
- Experience with microcontrollers, BTLE knowledge advantageous

Begin: February/March/April

Contact:

Christine Martindale
christine.f.martindale@fau.de
+49 9131 85-20159