

Werkstudent (Student job): Tutor for Body Sensor Networks

Introduction

In the lab course of Body Sensor Networks, a simple sensor network is built using an external accelerometer sensor and internal sensors of modern smartphones. Goal is to determine the physical activity, e.g. "walking", "running", "jumping", "cycling", based on accelerometer data. The algorithms are developed within Matlab/Simulink and used through automatic code generation for Android. Additionally a graphical user interface (GUI) has to be implemented in Java. During this lab course, students will be able to gather experience in the following aspects. (i) Hands-on experience in team-work (cooperation, project-/time planning, etc.). (ii) Java-based programming of modern smartphones (Android). (iii) High-Level programming and automatic code generation with Matlab/Simulink. (iv) Algorithms for physical activity recognition. (see <http://www.rcs.ei.tum.de/en/courses/labs/body-area-sensor-network/>)

We are currently looking for a tutor for this lab course in WiSe 2017/2018, who will help the student with the contents and technical details.

Required Skills

- Proficient with Android App development in Android Studio
- Proficient with Java
- Proficient with Matlab/Simulink
- Knowledge of Simulink code generation
- Knowledge of Bluetooth protocol

Tasks

- Familiarization with the contents of the lab course, including the tool chain, hardware and example applications
- Helping students on request with technical details during the course of the lab

Time Frame

- Preparation: flexible
- Tutor hours: Thursdays, 13:15 – 17:15, during lecture period WiSe 2017/2018 (Nov. 02 to Feb. 08)

Contact

If you are interested in this job, please contact:

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