

Zagreb, 6 March 2017

## MASTER THESIS ASSIGNMENT No. 1536

Student: **Bruno Vunderl (0036455534)**  
Study: Computing  
Profile: Computer Engineering

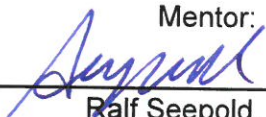
Title: **Enhancement of Sensor Mesh Functionality with Application on Sleep Tracking**

Description:

The focus of this project is enhancement of functionality, reliability and sensor accuracy of an intelligent bed that monitors human sleep. The scope of the project includes the implementation of an application layer protocol and network communication between the embedded system in the bed and remote server. Furthermore, the implementation possibilities of data preprocessing, filtering, and automatic sleep analysis are explored and tested. The system is tested and evaluated in the Ubiquitous Computing Laboratory at the Hochschule Konstanz University of Applied Sciences.

Issue date: 10 March 2017  
Submission date: 29 June 2017

Mentor:



Ralf Seepold, PhD

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