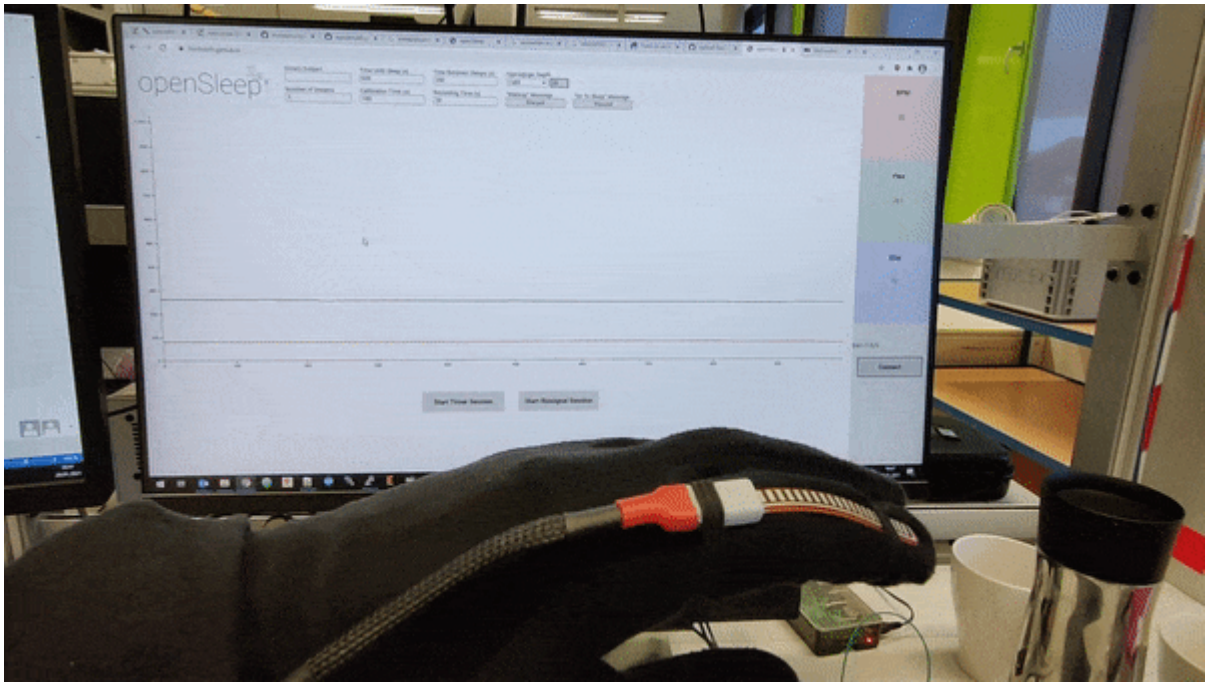
OpenSleep

Original Project: openSleep

Hardware

Since the original hardware is outdated I used an ESP32 microcontroller instead. The Heartrate sensor used in the original project did not work for me, so I ordered a MAX30102 sensor that is connected to the esp via i2c. It works better than the old one, although it is sometimes difficult to find a good position and the right amount of pressure for it to work. The flex sensor works perfectly fine. Because of the modified hardware, I wrote a new script for the esp32 based on a ble example. I attached the hardware with flexible tape to a microfiber glove from real. It's a little bit hard to get into but it is quite comfortable to wear.



Software

For the software, I used the dormio web application made by Eyal Perry. The application uses the chrome Bluetooth API, which means that it does not work with other browsers. Unfortunately,

Biosignal Sessions are not supported yet and I don't have much hope that they ever will be, since the application was last updated two years ago. Sessions based on a timer are available and the logging of the biosignals for later analysis does work.

From:
https://student-wiki.eolab.de/ - **HSRW EOLab Students Wiki**

Permanent link:
https://student-wiki.eolab.de/doku.php?id=opensleep:start&rev=1611937122

Last update: **2023/01/05 14:38**