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Since the original hardware is outdated I used an ESP32 microcontroller instead.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.

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