

Week 25

Tongue EMG XR Project

OpenBCI

- Best offline accuracy: **0.853**
- Online classifier works in one user but needs parsing of transitory classes.

Noraxon

- Adapted the pipeline to the new board.
- Changed the communication protocol and the way of logging the classes. Since Noraxon does not store the Unix timestamp, a custom code has been implemented to retrieve the samples via HTTP and automatically log the class windows.
- Recorded initial samples, with an initial offline accuracy of **0.820**

Next Week

- ☐ Test one subject:
 - ☐ Refine pipeline for noraxon
 - ☐ Preprocessing: wavelet transform, hilbert filter, kalman filter
 - ☐ Classification: threshold methods
 - ☐ Record swing data and refine the classifier. If possible, merge swing classes with discrete classes.
- ☐ Test inter subject