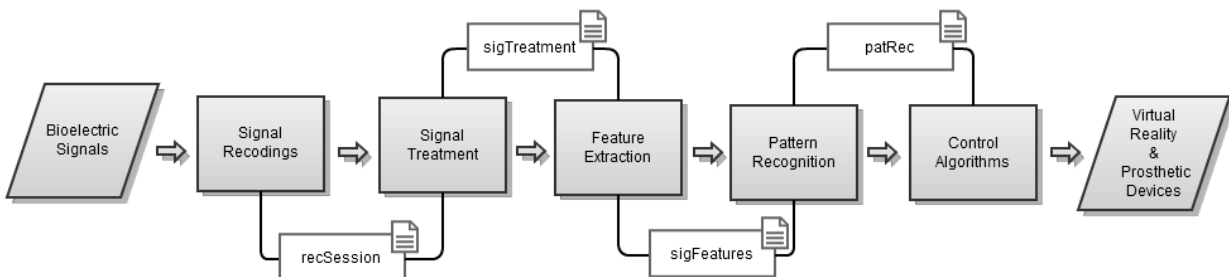


The Biomechatronics and Rehabilitation lab (BNL) at Chalmers is looking for a Master's student to join us in the development of the newest version of our open source research software BioPatRec.

BioPatRec is a Matlab based software used for research within prosthetics. The main purpose of BioPatRec is to record bioelectric signals (e.g. muscle and nerve signals), process these signals, extract features and then train machine learning algorithms on these features. Furthermore, BioPatRec allows patients to move a virtual arm and train to improve their control over it.



Your task would include the streamlining of the individual modules and make them into modular classes. Additionally, you would be responsible for designing a back-end structure for the data handling that allows to interface additional sensors and devices alongside with the existing devices that record bioelectric signals. A further task includes the updating of the graphical user interface and testing of the finished software suite.

#### Requirements

- Interest in prosthetics, Biomedical Engineering and Computer Sciences
- Familiarity with object-oriented programming, knowledge of Matlab is beneficial
- Experience in GUI design is beneficial

If interested contact us at [maxo@chalmers.se](mailto:maxo@chalmers.se)

You can watch a [video](#) of a possible application of our technology which was published in the Medical Journal *The Lancet*.