

# Brain State Decoding Lab

BrainLinks-BrainTools  
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## BCI Project - FAMOX



Just what is BCI,  
anyway?

A Brain-Computer Interface (BCI) makes use of machine learning methods, to decode ongoing brain signals. Via BCIs, users can type text, control a computer or wheelchair - even if they are severely motor impaired.

Who are we  
looking for?

CS master student seeking a master (group) project, or a thesis project -- ideally with a strong background in:

- machine learning
- Matlab / data analysis

The idea in brief:



We are convinced: decoding an acting brain is valuable beyond communication and control. Thus we take BCI methods into the field of stroke rehabilitation and create closed-loop applications for rehab training.

This project addresses a defect which has a severe impact on the quality of life of patients: **deficits in the refined motor control of movements.**

Then what is  
**your** task?



You support our lab by

- implementing a paradigm (Python-based)
- adapting a Matlab-based BCI experiment
- recording EEG from healthy and patients
- analyzing their EEG data (Matlab-based)



More information:

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