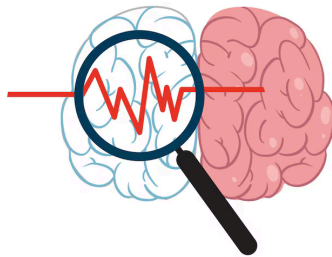


## Brain power: Investigating the energy of our thoughts

In this internship, you will have the chance to **design your own EEG experiment** to investigate how brain activity varies depending on the situation the human is in (for example during relaxed dreaming or solving a difficult math problem). The ultimate goal is to **prepare a student competition** where participants discover an insight into brain research and the energy consumption of our brain. To show the students how scientists investigate their brain activity with the help of a computer programme, you will be **preparing a practical session on EEG pre-processing and analysis** based on existing workshop material.

### Key Responsibilities:

- Create and implement an experiment to measure the power of brain activity.
- Develop a workshop on EEG preprocessing and analysis with the open source software package MNE Python.
- Help prepare and organize a student competition



### Requirements:

- Background in cognitive science, psychology, engineering, computer science or related
- Proficiency in Python, with a strong interest in signal processing
- Experience in EEG is a plus

### Benefits:

- Gain hands-on experience in experiment design using modern dry EEG caps and a state-of-the-art mobile amplifier
- Learn about approaches to pre-process and analyze EEG data
- Discover the secrets of energy consumption in the brain

**Start Date:** September 2024

Participation in the student competition in March 2025 is possible but not required. Interested? Submit your resume, academic transcripts (English or German) and a brief cover letter explaining your interest in the internship:

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