Deutsches Primatenzentrum
Leibniz-Institut für Primatenforschung

MSc. Thesis Project:

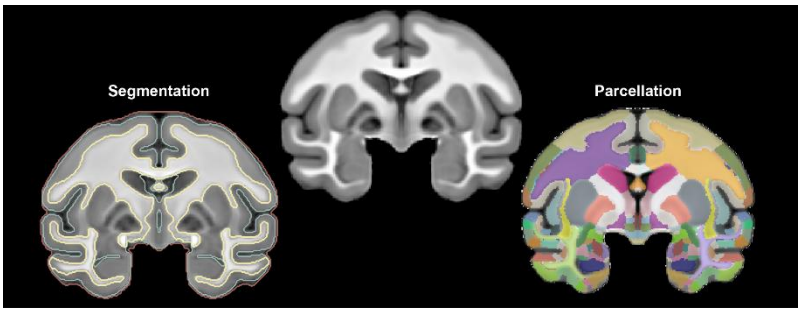
Morphometric analysis of macaque brain MRI

The Functional Imaging Laboratory at the German Primate Center is looking for a motivated student to join an innovative neuroimaging project at the crossroads of computer science, magnetic resonance imaging (MRI), and nonhuman primate research. If you are excited about algorithm development, data processing, and working with real-world biomedical datasets, this project is for you.

You will design, refine, and deploy an automated pipeline for volumetric and morphometric analysis of macaque brain MRI data - covering everything from brain extraction to segmentation and parcellation. This is your chance to work with high-resolution imaging data, develop and test your own algorithms, and gain hands-on experience with tools widely used in computational neuroscience and medical imaging.

Your work will create a fast, robust and reproducible workflow that will directly advance nonhuman primate neuroimaging. In the final stage of the project, you will use your pipeline to quantify age-associated volumetric and morphometric changes in the macaque brain generating insights that contribute directly to neuroscience research.

This project offers an ideal mix of programming, problem-solving, and scientific discovery in an interdisciplinary research environment.



Your profile:

- Master student in computer science, data science, or similar
- Experience with pipeline programming
- Knowledge about brain anatomy (helpful)
- Knowledge about MRI (helpful)

About the Functional Imaging Lab:

We are an interdisciplinary research group at the German Primate Center that focuses on developing and applying advanced MRI methods across biological models ranging from organoids to humans. Our work bridges the fields of physics, cardiovascular research, and neuroscience.

If you are interested in joining our interdisciplinary team, please contact:

Tor Rasmus Memhave – tmemhave@dpz.eu