

PhD student position available at caian

The **Centre for Artificial Intelligence and Neuroscience (caian)**, led by **Prof. Dominik Bach at University of Bonn**, is looking for a highly motivated PhD student to work on a cognitive-computational neuroscience project using machine learning methods, with intake in autumn 2026.

The project aims to derive a data-driven understanding of human action planning. The role involves analysing a large existing corpus of human movement data collected using VR trackers, optical cameras, and motion-capture systems. The successful candidate will apply unsupervised machine-learning methods to identify structure in these data and develop computational models of observed action sequences. These models will be used to test hypotheses about human action planning.

Applicants should have a MSc degree in computer science, computational (neuro)science, applied machine-learning, physics, or a related area, by the agreed start date of the position. Experience with Python and machine learning workflows is essential. The successful candidate will have experience in programming, solid knowledge of deep neural networks and applied statistics, and a demonstrated interest in understanding human behaviour. Prior research experience (e.g. conference papers, publications) is a plus. We offer interdisciplinary (neuroscience, computer science) supervision and collaboration, opportunities for high-profile publications and conferences, and training in machine learning and computational modelling. For details on the research setting see <https://caian.uni-bonn.de/en>

To obtain details about the position and the application procedure, please reach out by sending a CV and 1-page motivation letter in a single PDF to **Prof. Dr. Dominik Bach**, d.bach@uni-bonn.de