

## Position for PhD Project in Deep Learning for Computational Neuroscience

Part of the new Collaborative Research Center "Mathematics of Experiment"

Lab of Alexander Ecker, University of Göttingen

Joint project with Tim Gollisch (University Medical Center Göttingen)

November 30, 2020

A PhD position is available in the lab of Alexander Ecker at the University of Göttingen, Germany. Our group studies visual information processing in biological and artificial neural networks and works closely with experimental neuroscientists. At the interface of machine learning and computational neuroscience, we develop new methods and algorithms to make sense of large-scale neuroscience data and work on novel approaches to computer vision.

We are looking for a highly motivated PhD student with a strong interest in developing deep learning tools for neuroscience and working closely with experimental neuroscientists. The ideal candidate has a background in computer science, mathematics or physics and experience with machine learning and deep neural networks. Prior experience in neuroscience is a plus, but not required.

The project is part of the newly established Collaborative Research Center "Mathematics of Experiment" (https://www.uni-goettingen.de/en/628179.html) and will be a collaboration with the lab of Tim Gollisch (University Medical Center Göttingen). The goal of the project is to record spiking activity from the retina under various visual stimuli (including natural stimuli) and study the signal processing in the inner retina with modern data science methods, including convolutional neural networks and deep learning.

Our research group if part of the strong and lively neuroscience research community of Göttingen, including the University, the University Medical Center, several Max Planck Institutes, the German Primate Center, and the European Neuroscience Institute. We are also part of the Campus Institute Data Science (<a href="http://uni-goettingen.de/cidas">http://uni-goettingen.de/cidas</a>) and the Bernstein Center for Computational Neuroscience Göttingen (<a href="https://www.uni-goettingen.de/en/615355.html">https://www.uni-goettingen.de/en/615355.html</a>). For more information about the research group, please visit our website: <a href="https://eckerlab.org">https://eckerlab.org</a>.

The position is for three years, with a possibility for extension. Please send your application to Alexander Ecker (<a href="ecker@cs.uni-goettingen.de">ecker@cs.uni-goettingen.de</a>) including a CV, a statement of what interests you in science and in the work of our research group, and contact details for two references.

The University of Göttingen is an equal opportunity employer, and women are especially encouraged to apply. Applicants with disabilities and equal qualifications will be given preferential treatment.