Fully funded Ph.D. Position (m/f/d) in Deep Learning applied to Animal Behavior

Institution/Department: Lamarr - Institute for Machine Learning and Artificial Intelligence & Department of Information Systems and Artificial Intelligence, University of Bonn
Location: Bonn, Germany
Starting Date: from October 1, 2025
Contract Duration: 3 years, with potential for extension
Salary: According to TV-L E13 (German public sector salary scale)

Project Description:

We are seeking a highly motivated PhD student to join our research group at University of Bonn, working at the interface of machine learning, neuroscience, and behavioral biology. The project focuses on developing and applying deep learning models to quantify and interpret complex animal behavior from 2D and 3D kinematic recordings (multi-dimensional time series).

This interdisciplinary project combines computational modeling, self-supervised learning, and time-series analysis to explore how behavior encodes internal states, environmental context, and experimental perturbations.

Your Tasks:

- Develop machine learning methods (e.g., deep neural networks, representation learning, generative models) for analyzing high-resolution behavioral data
- Contribute to ongoing interdisciplinary projects involving collaborations with neuroscientists and biologists
- Present research results at international conferences and contribute to publications
- Participate in graduate training and group seminars

Your Profile:

- [required] Master’s degree (or equivalent) in computer science, physics, mathematics, computational biology, or related fields
- [required] Strong programming and deep learning skills (Python, PyTorch/TensorFlow, data analysis tools)
- [preferred] Interest or experience in time series modeling and behavioral analysis
- [required] A collaborative and self-motivated mindset
- [required] Proficiency in English (spoken and written); knowledge of German is not required

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We Offer:

- A dynamic and interdisciplinary research environment within an internationally recognized university
- Access to high-performance computing infrastructure and behavioral datasets
- Mentoring and support for scientific development and career progression
- Opportunities for collaboration with experimental labs and external partners
- Support for participation in workshops, conferences, and training programs

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Application Process:

Please send your application including:

- A cover letter (max. 1 page) outlining your motivation and fit for the position
- Curriculum vitae
- Contact details of 1–2 academic referees

Application deadline: 31.07.2025

Applications and further inquiries should be sent via email to: France ROSE, france.rose [at] wanadoo.fr

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University of Bonn is committed to diversity and equal opportunities. We welcome applications from individuals of all backgrounds, including those with disabilities.