



The Institute of Information Processing invites applications for the position of a

## **Research Assistant (m/f/d) on the subject of "Efficient and Interpretable Reinforcement Learning" (Salary Scale 13 TV-L, 100 %)**

starting immediately. The position is limited to 3 years. Within this employment the possibility for a doctorate is given.

### **Responsibilities and duties**

Machine learning methods are widely used in areas such as computer science, medicine, chemistry, and optimization of industrial processes. In particular, reinforcement learning algorithms have achieved astonishing results in these areas in recent years and are the driving force behind numerous new developments. However, the development of versatile methods also poses challenges for their robustness, interpretability as well as their data and learning efficiency. In particular, the latter is increasingly becoming a focus for the development of new methods due to the high energy costs for training models in view of the increasing challenges of climate change.

In the context of this employment, methods for an efficient training of reinforcement learning agents shall be developed, the results of which shall be robust and comprehensible.

### **Employment conditions**

The prerequisite for employment is a completed scientific university degree, preferably in the field of computer science or related fields. Experience with artificial intelligence, especially the use of neural networks as well as reinforcement learning algorithms, is an advantage. In addition, experience with the Unity Game Engine as well as the programming languages C# and Python is desirable. In general, an independent way of working, willingness to learn and professional as well as social commitment are required. In addition, a good knowledge of German or English, both written and spoken, is expected.

We offer a diverse, inspiring institute environment with interdisciplinary, internationally visible research groups that have already achieved extensive scientific success. We enable you to develop scientifically and personally through responsibility for scientific and industrial projects.

Leibniz University Hannover considers itself a family-friendly university and therefore promotes a balance between work and family responsibilities. Part-time employment can be arranged upon request.



Leibniz  
Universität  
Hannover

The university aims to promote equality between women and men. For this purpose, the university strives to reduce under-representation in areas where a certain gender is under-represented. Women are under-represented in the salary scale of the advertised position. Therefore, qualified women are encouraged to apply. Moreover, we welcome applications from qualified men. Preference will be given to equally-qualified applicants with disabilities.

For further information, please contact Prof. Dr.-Ing. Alexander Dockhorn (Email: [dockhorn@tnt.uni-hannover.de](mailto:dockhorn@tnt.uni-hannover.de)).

Please submit your application with supporting documents by January 8, 2023 digitally to

Email: [bewerbung@tnt.uni-hannover.de](mailto:bewerbung@tnt.uni-hannover.de)

or via mail at:

**Gottfried Wilhelm Leibniz Universität Hannover**

Institut für Informationsverarbeitung (tnt)

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<http://www.uni-hannover.de/jobs>

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