

The chair of Robotics and Embedded Systems has an open

doctoral position (full time)



About us:

Technische Universität München (TUM) is one of Europe's top universities. It is committed to excellence in research and teaching, interdisciplinary education, the active promotion of promising young scientists and also forges strong links with companies and scientific institutions across the world. The TUM department of Computer Science has been listed among the Top 10 Universities of the world by the *Times Higher Education World*.

At TUM's Department of Informatics, chair of Robotics and Embedded Systems (Prof. Knoll), we are looking for a candidate with a master's degree in computer science or related fields. The successful candidate will be working as a research assistant in the project described below.

Project description:

This collaborative project with BMW AG targets the design and development of the specialized machine learning algorithms required for identifying patterns and labelling test-drive data, which encompasses not only video, images and multivariate series, but can also be enriched with further data from external sources like weather or map information.

Requirements:

The successful candidate is expected to possess

- Master's degree or equivalent in computer science or related fields
- extensive programming experience (Python, C++ depending on used Neural Network framework)
- wide knowledge in the field of Machine Learning especially with Neural Networks
- basic knowledge in
 - existing Neural Network frameworks (TensorFlow, Caffe, Torch, ...)
 - advanced Neural Network techniques (Pooling, Convolution, RNN, LSTM, GRU)
 - optimization algorithms for Neural Networks

Experience in the following areas is beneficial but not required

- Handling of common data formats (e.g. HDF5)
- Big Data handling (e.g. Apache Hadoop)
- Description of driving scenarios and events
- GPU programming
- Code versioning (e.g. GIT)
- Unix operating systems

What we offer:

- Great working environment in a young and dynamic team
- Remuneration in line with the current German public service salary scale TV-L, level E13
- the possibility of a dissertation

TUM has been pursuing the strategic goal of substantially increasing the diversity of its staff. As an equal opportunity and affirmative action employer, TUM explicitly encourages nominations of and applications from women as well as from all others who would bring additional diversity dimensions to the university's research and teaching strategies. Preference will be given to disabled candidates with essentially the same qualifications. International candidates are highly encouraged to apply.

Interested?

Applications should include a statement of motivation, CV, copies of official academic documents and certificates to be submitted in a single pdf file. To receive full consideration, the application material should be emailed to: Dr. Daniel Renjewski: daniel.renjewski@tum.de **by January 15th, 2018.**