

Scientific Employee in the Topic Area of AI on Custom Hardware

The professorship “Big Geospatial Data Management” is looking for academic staff to support developments around artificial intelligence for spatial data management with a view towards hardware design, edge computing, autonomous flight of drones and modern didactics, starting as soon as possible.

Your responsibilities:

The professorship for Big Geospatial Data Management research concentrates on methodology of acquisition, organization, compression, analysis, and visualization of georeferenced or geometric data in large scales. We put emphasis on methods of distributed computing, machine learning, image and text analysis, randomized data structures, high performance computing and quantum algorithms. Our tasks include teaching computer science aspects to students in the areas of geodesy, cartography, aerospace engineering and computer science.

In these positions, you are responsible for designing, evaluating and implementing novel architectures for computer vision and deep learning in an edge-computing context focusing on FPGAs, SoCs and self-designed custom AI chips. In addition, you are welcome to contribute to the development of a novel curriculum designed to enable students to build and deploy their own custom hardware.

Opportunity and support for innovation (patents, spin-offs, etc.) are available.

Your qualifications:

You hold a degree in mathematics, computer science, physics, data science or related fields and are interested in independently investigating scientific questions and working in a team. Dedication to learn in areas of data mining, machine learning, distributed systems, chip design are required - both in theory and practice.

Our offer:

We offer two full-time positions as academic staff (postdoc or doctoral student) with the opportunity to pursue a doctoral/habilitation degree. The positions will be initially limited to three years. Payment will be based on the Collective Agreement for the Civil Service of the Länder (*TV-L*). TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Applications from disabled persons with essentially the same qualifications will be given preference.

Your application:

If you are interested in working in our team, please send your application together with a CV and supporting documentation as a single PDF file to us no later than 28 February 2022.

Email address: applications.bgd@ed.tum.de

Do not hesitate to contact Prof. Dr. Martin Werner (martin.werner@tum.de) for any questions you may have. If you apply in writing we request that you submit only copies of official documents, as we cannot return your materials after completion of the application process.

As part of your application you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at <https://portal.mytum.de/kompass/datenschutz/Bewerbung/>. By submitting your application you confirm to have read and understood the data protection information provided by TUM.

Find out more about us at <https://www.bgd.lrg.tum.de/>