

Oppation to talente

The TUM Department of Aerospace and Geodesy seeks to fill the position of a

# PhD Candidate (m/w/d) in the area of Data Science, Data Mining and Machine Learning with Geodata

starting October 1<sup>st</sup>, 2021.

The position will be hosted by the Chair of Remote Sensing Technology – a joint appointment of the Technical University of Munich and the Remote Sensing Technology Institute of the German Aerospace Center (DLR) – and the Professorship for Big Geospatial Data Management. Both labs engage with the development and fundamental research of computer vision and machine learning methods for automated analysis and processing of multi-modal remote sensing data, while putting special focus on spatial scalability.

### About us

TUM is committed to excellence in research and teaching, interdisciplinary education, and the active promotion of promising young scientists. TUM also forges strong links with companies and scientific institutions across the world and regularly ranks among the best European universities in international rankings. The newly founded Faculty of Aerospace and Geodesy plays a central role within the high-tech agenda of the Bavarian State Government and will address current issues of urban mobility, digitization, and environmental protection and advance them with modern, strongly international, and interdisciplinary approaches in research and teaching. In cooperation with established industrial and research institutions, an internationally competitive "Space Valley" is to be created in the Munich Metropolitan Region.

### Requirements

- excellently-qualified graduates with a diploma or master's degree in Computer Science, Mathematics or Statistics, Geoinformatics, Physics, Cartography or comparable fields,
- in-depth methodological knowledge in the field of machine learning, statistical models, data science, or data mining on geodata, especially considering deep neural network architectures,
- practical experience with software development using common open-source libraries and frameworks,
- interest in working with multi-modal, multi-scalar and multi-temporal Earth observation data
- analytical thinking, independent and structured work, as well as willingness to cooperate with distributed teams
- good English language skills

### Tasks

The position will be part of the project "Modelling, Prediction and Anomaly Detection of Earth Surface Dynamics", embedded into the Joint Academy of Doctoral Studies (JADS), a cooperation between TUM and Imperial College London (ICL).

### We offer

- a fully-funded scholarship worth 2.000 € (income tax free) per month for 4 years granted by TUM's International Graduate School of Science and Engineering (IGSSE),
- the opportunity and support to pursue a doctoral degree at TUM jointly with ICL, two of the most renowned universities in Europe,
- extra funding for international travel and one long-term stay (12 months) at ICL,
- an interdisciplinary, international, and diverse research environment at TUM in cooperation with ICL, and
- a dynamic working environment in a young, research-interested, and curiosity-driven team.



## Application

We look forward to receiving your application documents (cover letter, curriculum vitae, study certificates, ...) by email until 31.07.2021 to apply@Imf.Irg.tum.de. Please mention the keyword "JADS" in the subject line. Application documents sent by post will not be returned after the procedure is completed. If you have any questions regarding the position, please contact Dr. Marco Körner (marco.koerner@tum.de).

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. In principle, the position can also be filled on a part-time basis.

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.

### **Technical University of Munich**

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### **Further Information**

- TUM's Graduate School: www.gs.tum.de/en
- TUM's International Graduate School of Science and Engineering (IGSSE): www.igsse.gs.tum.de/en
- Joint Academy of Doctoral Studies (JADS): www.igsse.gs.tum.de/en/research/jads-tum-icl-joint-academyfor-doctoral-studies/