

TU Wien is Austria's largest institution of research and higher education in the fields of technology and natural sciences. With over 26,000 students and more than 4000 scientists, research, teaching, and learning dedicated to the advancement of science and technology have been conducted here for more than 200 years, guided by the motto "Technology for People". As a driver of innovation, TU Wien fosters close collaboration with business and industry and contributes to the prosperity of society.

The **Research Unit Engineering Geodesy** of the Department of Geodesy and Geoinformation of TU Wien has a vacancy for a

Project Assistant (PhD or PostDoc)

expected to start in February 2025 (30 hours per week, limited to 3 years). The planned activities are part of an FWF research project on real estate valuation with artificial neural network methods. The project is being conducted in collaboration with TU Dresden. The focus of activities at TU Wien is set on methodological developments and analyses in the field of artificial neural networks, especially on model selection on basis of structural risk minimization.

Your responsibilities:

- Expansion of available datasets using machine learning methods;
- Defining and improving artificial neural networks models by structural risk minimisation with focus on Vapnik-Chervonenkis dimension;
- Development of parameter estimation algorithms accounting for data uncertainty;
- Quality analysis of the approaches and of the obtained results.

Your profile:

- Graduation of a university study programme in which extensive skills in the areas of machine learning, optimization and data processing, parameter estimation are taught (e.g. Geodesy and Geoinformation, Mathematics, Data Science)
- Very good programming skills;
- Handling data from the field of real estate valuation (advantageous);
- Experience in scientific interdisciplinary working and publishing (advantageous);
- Very good knowledge of English;
- Organisational and analytical skills as well as a structured way of working;
- Ability to work in a team and problem-solving skills.

<u>We offer</u>:

- Diverse and exciting field of activity in a collegial team
- Hybrid way of working with up to 50% home office option

- A range of attractive social benefits (see Fringe-Benefit TU Wien catalogue)
- Wide range of internal and external training programmes
- Central location and good accessibility (U1/U2/U4 Karlsplatz)

TU Wien is committed to increasing the proportion of women in particular in leadership positions. Female applicants are explicitly encouraged to apply. Preference will be given to women when equally qualified, unless reasons specific to a male applicant tilt the balance in his favour.

People with special needs are equally encouraged to apply. In case of any questions, please contact the confidant for disabled persons at the university, Mr. Gerhard Neustätter.

The salary for this position is based on the Austrian regulations for university staff. The monthly minimum gross salary ranges between \in EUR 3.714,80 (MSc level) and \in 4.932,90 (PostDoc level) for a 40h/week employment. The monthly salary is paid 14 times per year.

We look forward to receiving your application until February 16th, 2025.

If this job opportunity fits your career development plans, we are looking forward to receiving your application in English (cover letter, CV, relevant publications and references) and in one single PDF file via e-mail to <u>hans.neuner@geo.tuwien.ac.at</u>. Candidate selection will start on **February 17th**, 2025 and will continue until a suitable candidate is found. TU Wien will not refund any cost occurred in the course of an application.