The Research Unit of Photogrammetry of the Department of Geodesy and Geoinformation, TU Wien is seeking a motivated

Project Assistant (any gender) to work as a

Researcher in trajectory estimation, satellite navigation and high resolution LiDAR mapping

You enjoy working in a scientific environment at the leading edge of research? You are interested in high resolution point cloud data and sensor orientation? You want to answer scientific questions and find excellent technical solutions, embedded in a team? If the answer is yes, then this job is for you!

Our group comprises about 20 staff members currently working on approximately 15 projects supported by various national and European programs and funding sources. The specific projects focus on using high resolution laser scanning data, inertial data, and GNSS data to estimate the trajectory of a mobile platform while ensuring high quality point clouds in one processing step.

To strengthen the research work of our team, we are looking for a skilled colleague interested in geo-data and in science with a background in geodesy, geoinformation, geospatial sciences, computer science, or mathematics. The project is a collaboration of the research groups Photogrammetry and Higher Geodesy of TU Wien and the company Riegl.

Your responsibilities:

- Improving and developing scientific algorithms for estimating trajectories of mobile platforms from GNSS, INS, and LiDAR data, including the advancement of precise point positioning (PPP)
- Implementing those algorithms to allow testing and evaluation of the algorithms and workflows
- Executing experiments and collecting reference data to assess the quality of developed solutions
- Writing scientific journal and conference papers, technical documents and project reports

Your skills

- Master degree in geodesy, geoinformation sciences, data science, remote sensing, earth sciences, information sciences, computer science, mathematics, or similar
- Excellent programming skills (preferably C++ and/or Python). Knowledge of MATLAB is beneficial but not required
- Solid knowledge of mathematics, numerical methods (e.g., non-linear optimization), parameter estimation and statistical methods (e.g., least-squares estimation, Kalman filters)
- Experience in point cloud processing
- Understanding of laser scanning, inertial navigation, and satellite navigation, in particular GNSS positioning including GNSS-PPP
- Experience in surveying and conducting field measurements

- Strong analytical and technical skills and problem-solving capability
- Good written and spoken communication skills in English

We Offer

- The opportunity to work in an innovative, dynamic and successful team
- A stimulating and friendly working environment at the department
- State-of-the-art IT and support staff
- Close collaboration with industry partner
- Freedom to discuss and implement your own ideas
- Flexible working hours
- Workplace close to city centre, metro and main train station and ample outdoor opportunities in the vicinity of Vienna
- For PraeDocs it is expected to enroll in the PhD programme at TU Wien and to further develop and complete a PhD

The salary for this position is based on the Austrian regulations for university staff. The monthly minimum gross salary is € 3.714,80 (MSc level) for a 40h/week employment. The monthly salary is paid 14 times per year. The extent of working hours per week can be negotiated.

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 with the subject `**Trajectory Estimation Researcher**´ to **apply@geo.tuwien.ac.at**

Candidate selection will start on **25th of January, 2026** and will continue until a suitable candidate is found. The contract will initially be limited to 2 years (with possible extensions up to 4 years). TU Wien will not refund any cost occurred in the course of an application.

The envisaged start date of work is 1st of April, 2026.

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