



The Department of Landscape, Spatial and Infrastructure Sciences, Institute for Transport Studies is  
currently seeking a

## Postdoctoral Research Associate Project employment (Reference code: 36)

Extent of employment: 40 Hours per Week  
Duration of employment: April 2020, limited to March 2022  
(with option of limited extension until September 2024)

Gross monthly salary and pay grade in terms of collective agreement  
for university staff (payable 14 times per year): B1 lit. b, € 3.889,50

### Responsibilities

- Develop a decision support system (e.g. activity-based model simulation) to analyse the impacts of micro-mobility and/or other automation and digitalisation initiatives to the existing transport and mobility system in Vienna and surrounding regions
- Working with existing transport modellers in the region to improve the existing transport modelling framework, in particular to anticipate the mixed use of traditional and new type of datasets
- Contribute to ongoing and the acquisition of new third party funded projects at the institute
- Publication of results in journals and active participation at (inter)national conferences
- Play significant role in project management, teaching, and administrative tasks within the research group and at the institute of transport studies
- Support the supervision of junior researchers and PhD students

### Required skills and qualifications

- Doctoral degree/PhD
- Degree in Computer science, transportation engineering or similar numerical degrees
- Experience in Transport and Mobility research and simulation (travel behaviour analysis, travel demand forecasting, automation and digitalisation impacts analysis)
- Experience with relevant scientific software packages (python, Java, R, Matlab/Octave,...)
- Good programming, software engineering and development skills
- Demonstrated ability to write and publish high quality scientific papers
- Good oral and writing skills in English
- Interest in mobility behaviour and research in the transport field
- Demonstrated ability to learn new languages and willingness to learn German

### Desirable skills and qualifications

- Experience and ability to construct a complex transport model and/or simulation platform is a strong merit
- Experience with programming languages (Python, Java) is a strong merit
- Knowledge of specialised software for agent-based simulation (e.g. MatSim or alike) is a strong merit
- Being proficient in German language and being familiar with Austrian transport research landscape are important assets

- Experience of working with large scale or GPS-based datasets, or alike, is a merit
- Experience with analysing complex human decision making processes is a merit
- Experience in lecturing on relevant subject and supervision would be a plus
- Experience in modern software development techniques, version control and deployment tools, databases/SQL, programming languages (e.g. Java), Big Data and HPC frameworks is a bonus

Applications can be submitted until: 10<sup>th</sup> of March 2020

University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour.

Please send your job application to Personnel department, University of Natural Resources and Life Sciences, 1190 Vienna, Peter-Jordan-Straße 70; E-Mail: [kerstin.buchmueller@boku.ac.at](mailto:kerstin.buchmueller@boku.ac.at). (**Reference code: 36**)

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process.

**[www.boku.ac.at](http://www.boku.ac.at)**