

PreDoc

The **Business Informatics Group (BIG)** at TU Wien offers two positions as university assistant (pre-doc) limited to 4 years for 30 hours/week. Contingent on availability of project funds, these positions can be extended to a full-time position of 40 hour/week.
Expected start: January 2023.

You will work in the context of the Digital Enterprise Modelling Lab, where you will be expected to contribute significantly to the research programme on enterprise modelling. This research programme combines foundational, applicative, empirical, and technological aspects of enterprise modelling research. A key element of this programme is the development of an advanced digital enterprise modelling platform that will serve as a foundation to validate new modelling theories and gather empirical data. You will also be expected to contribute to the development of this platform, combining general model-driven engineering technologies with advanced technologies for the representation and manipulation of models and (collaborative) human-model interaction.

You hold an MSc in computer science, business informatics, or a related discipline, and possess a good (theoretical and programming) background pertaining to the core technologies; in particular knowledge graphs and model-driven engineering. You also have an interest in, or experience with, other relevant core technologies, such as: natural language processing, ontology representation languages, model-based simulation, symbolic AI and sub-symbolic AI, and/or technologies to support advanced human-model interaction such as augmented reality, animation, immersion, and touch screens.

As you are also expected to contribute to the development of the digital enterprise modelling platform, you not only have an interest in doing research, but combine this with software engineering skills, and a drive to translate research ideas and concepts into running software.

We welcome applicants from a diverse range of backgrounds, and we particularly encourage applications from women and underrepresented minorities.

Tasks:

- Diving deep into scientific problems and conducting collaborative and independent research
- Supporting the group's teaching and supervision of students
- Development of new methods and concepts, and their realization in software and associated evaluation prototypes
- Contribute to interdisciplinary scientific projects and the development of new research project proposals
- Authoring international publications in top conferences and journals related to your work
- Contribute to the development of the digital enterprise modelling platform
- Preparation of a dissertation and completion of a PhD program at the Faculty of Informatics (see <https://informatics.tuwien.ac.at/doctoral/>)

Your profile:

- Completed MSc (or close to completion) in a relevant field
- Knowledge of, and initial experience in, scientific work
- A drive for interdisciplinary research
- Experience in teaching and pleasure in working with/supervising students is a plus
- Organizational and analytical skills as well as a structured way of working
- Software engineering skills
- Experience in, or knowledge of, relevant technologies and theories. In particular with regards to model-driven engineering, enterprise modelling, and knowledge graphs
- Excellent command of English, both in speaking and writing
- Knowledge of German (level B2) or willingness to learn it in the first year
- Excellent skills in problem solving, creativity, and innovation
- Good communication skills and team orientation

We offer:

- Work in a dynamic, interdisciplinary, and multicultural research team
- Continuing personal and professional education and flexible working hours
- Central location of workplace with very good accessibility (U1/U4 Karlsplatz)
- A creative environment in one of the most liveable cities in the world