TU WIEN Informatics

Announcement of an open position
at the Faculty of Informatics at TU Wien for an

Assistant Professorship (all genders) with Tenure Track
of Semantics in Automation Systems

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 **Faculty of Informatics at TU Wien** invites applications for a full time Assistant Professor (all genders) position with tenure track. The position has a focus on Semantics in Automation Systems and is affiliated with the Institute of Computer Engineering, Research Unit Automation Systems. The estimated starting date is **March 2025**. The work contract is initially limited to six years. The candidate and TU Wien can agree upon a tenure evaluation, which when positive, opens the possibility to change the position to Associate Professor with an unlimited contract.

TU Wien is among the most successful technical universities in Europe, and it is Austria's largest scientific-technical research and educational institution. The Faculty of Informatics, one of the eight faculties at TU Wien, plays an active role in national and international research and has an excellent reputation. The main areas of research include Computer Engineering, Logic and Computation, Visual Computing & Human-Centered Technology, as well as Information Systems Engineering.

Tasks:

The successful candidate will have an outstanding research and teaching record in the field of Semantics in Automation Systems. Semantic technologies, such as ontologies and knowledge graphs, are increasingly being used in automation to provide operational technology (OT) with a deeper understanding of the data they process. By organizing information according to meaningful relationships and concepts, semantic technologies enable more intelligent decision-making and control. Innovative approaches are necessary to standardize the meaning of data and messages exchanged between different systems from the OT area with the Information Technology (IT) domain, providing semantic interoperability that facilitates seamless integration and collaboration.

The research areas of the successful candidate should cover some of the following research topics but are not limited to them:

- Semantic system modeling of automation systems
- Industrial IoT (IIoT) architectures and their integration into automation systems
- Industrial communication systems
- Digital twinning with a focus on rule-based or logic-based approaches
- Knowledge representation of automation systems in the areas of factory automation (Industry 4.0), building automation and energy systems (smart grids, energy communities)

The candidate should have experience in working with industry or public administrations, should have relevant postdoctoral experience, and a compelling research vision. Experience with current standardization activities is desirable.

We are particularly interested in candidates who will complement our existing expertise and lead to fruitful collaborations not only with other members of the Faculty of Informatics but with TU Wien as a whole.

Besides research, the duties of an Assistant Professor at TU Wien include graduate and undergraduate teaching (in English and German). It is expected that the successful candidate will deliver courses related to distributed automation, IT in automation, home and building automation, computer systems and industrial communication. Contributing to usual management and faculty service tasks is also expected.

Your profile:

Applicants are expected to have the following qualifications.

Essential
- PhD or doctoral degree in Computer Science, or related subjects
- Post-doctoral experience at a university or other research institution
- Outstanding research and publication record
- Experience in inter-disciplinary research
- Excellent reputation as an active member of the international scientific community
- Experience in raising research funds and managing scientific research projects
- Experience in university teaching as well as supervision or co-supervision
- Excellence in written and spoken English
- Proficiency in German or willingness to quickly acquire German language skills
- Administrative and organizational skills
- Commitment to Diversity and Inclusion

Desirable
- Leadership and Administration
- Experience with scientific project collaborations and standardization activities
- Public Engagement and Outreach
- Industry Experience

We offer:
- Excellent working conditions in an attractive research environment
- An attractive salary, including additional contributions to a pension fund
- Support for relocating to Vienna (if required)
- A position in a city with an exceptional quality of life
- Central location of workplace with very good accessibility (U1/U4 Karlsplatz)

Additional benefits for employees can be found at the following link:
- [Fringe-Benefit Catalogue of TU Wien](#)

General information can be found at the following links:
- TU Wien
- Faculty of Informatics
- The 4 research foci of the Faculty of Informatics
- Institute of Computer Engineering
- Research Unit Automation Systems

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 employment starts as University Assistant with a minimum salary of EUR 4.752,30 gross (14 x per year) according to the collective bargaining agreement for a PostDoc. After signing the qualification agreement, the employment continues as Assistant Professor with a minimum salary of EUR 5.595,60 gross (14 x per year).

We look forward to receiving your application until August 1st, 2024

Applications have to include the following documents:

- A **detailed curriculum vitae**
- A **letter of motivation**
- A **teaching statement:** 2 pages maximum
- A **research statement:** brief summary of **past research activities, as well as** a convincing outline of **planned research activities,** and an explanation of their contribution to the scientific profile of the Faculty of Informatics; 4-6 pages maximum; incl. abstract
- Certificates of **doctoral and diploma degrees** should be uploaded under the category: *+add more documents*
- A list of publications sorted by journals, conference papers, and other publications
- Copies of the applicant's **three most important publications** related to the position together with an explanation of their relevance should be also uploaded under the category: *+add more documents*

Applications should be addressed to: https://jobs.tuwien.ac.at/Job/234165