



Open Position

Assistant Professor of Artificial Intelligence for Visual Computing (Tenure Track)

September 9, 2021



Informatics



Call for Applications

We invite applications for the position of an Assistant Professor of Artificial Intelligence for Visual Computing. The position is affiliated with the Institute of Visual Computing and Human-Centered Technology.

Deadline **September 9, 2021**

Est. Start **March 2022**

Salary **€65.328,20 p.a. (until tenure evaluation)**
€70.833,00 p.a. (upon positive tenure evaluation)

Conditions **full-time, preliminarily limited to six years, upon positive tenure evaluation permanent**

Errors and omissions expected in this brochure. The legally binding announcement for this position is published at jobs.tuwien.ac.at/Job/159081



Research Area

The candidate should have extensive experience in diverse forms of learning from visual data like images, videos, 3D data and 4D data (e.g., CNNs, R-CNNs, SAEs, RNNs, Deep Belief, GANs, One Shot Learning). The exponentially increasing amount of 2D & 3D images and videos that forms the input of today's machine learning tasks leads to an explosion of dimensions in the artificial neural networks used. These cannot be handled by existing approaches, regardless of whether they use traditional handcrafted features or deep learning based ones.

The following non-exhaustive list highlights potential topics of a successful candidate, who should have experience in at least two of them:

- Compact and efficient representations in 3D (real-time) reconstruction
 - 3D point clouds
 - 3D object understanding
 - Neural rendering
 - Wearable/mobile devices with strict low-power constraints
 - Autonomous driving
 - Pose estimation
 - Biometric recognition systems
 - Environment embedded perceptual interfaces
 - Style transfer
 - Colorization
 - Action recognition
 - Semantic and instance segmentation
 - Biomedical image and video analysis
 - Adversarial attacks
 - Synthesizing images
- Furthermore, a successful candidate should pay special attention to:**
- Human-in-the-loop
 - Explainability and interpretability
 - Data set bias
 - Deep fakes and other ethical challenges of AI



Requirements

Your Profile

Essential

- PhD or doctoral degree in Computer Science or related subjects
- Post-doctoral experience at a university or other research institution
- An outstanding research and publication record
- An 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

- Pedagogic and didactic skills
- Administrative and organizational skills
- Gender sensitivity and social skills

Desirable

- Leadership skills
- If the candidate's knowledge of German is not sufficient, the willingness to learn German is expected
- Experiences in inter-disciplinary research



Other Responsibilities

Teaching

Besides research, the duties of an Assistant Professor at TU Wien include graduate and undergraduate teaching (in German and English)

Faculty Management

We expect the successful candidate to actively contribute to usual management and faculty service tasks.

Collaborating

The successful candidate will have a compelling research vision. We are particularly interested in candidates working in areas that will complement our existing expertise and lead to fruitful collaborations with other members of the Faculty of Informatics and TU Wien in general.



Our Offer

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

Salary

The employment starts as University Assistant with an annual minimum salary of €55.242,60 gross according to the collective contract for a postdoc. Signing the qualification agreement upgrades the position to Assistant Professor with an annual minimum salary of €65.328,20.



Application

Required Documents

- A detailed curriculum vitae
- A letter of motivation
- Certificates of doctoral and diploma degrees
- 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
- A list of publications and Copies of the applicant's three most important publications related to the position together with an explanation of their relevance

Application Deadline

September 9, 2021 – Apply online at jobs.tuwien.ac.at/Job/159081



Faculty of Informatics

We are in the Global Top 15% in Computer Science and comprise 4 Research Foci and 22 Research Units.

Since our foundations were laid in 1970, we have become Austria's largest faculty of Informatics and one of Europe's leading research and innovation institutions—with over 370 scientific employees, 5.500+ enrolled students, and over 75 administrative staff members.

Our faculty's excellent research, teaching and innovation output is highly competitive even on a world-wide level: The most important and influential Higher Education Rankings regularly rank us among the Global Top 15% of computer science institutions.

Research Foci

Our research foci are Computer Engineering, Logic and Computation, Visual Computing and Human-Centered Technology and Information Systems Engineering. Our 22 research units follow an inter- and multidisciplinary, comprehensive approach.

Teaching

We offer 5 Bachelor's programs and the excellence program Bachelor with Honors for outstanding undergraduates. Most

of our 8 Master's programs are given in English. Students of the doctoral program and the 7 doctoral colleges are members of our Doctoral School.

Social Responsibility

We recognize our responsibility in the shaping of desirable futures for our society. We strive to comment on the impact of information technologies on society, and actively further the knowledge and innovation transfer to companies and the public.



TU Wien

Founded in 1815, TU Wien has become Austria's largest scientific and technical research and education institution.

"Technology for people" – that is TU Wien's mission statement. It stands for academic excellence through research and wide-ranging competence through teaching.

A motivating working environment in which people can develop and realise ambitious goals is crucial to the success of our university. TU Wien offers an exciting and varied working environment for employees from diverse backgrounds and with varying levels of experience. Skilled and motivated employees form the best foundation for and are directly linked to our success.

At TU Wien, we are committed to fulfilling our social responsibility and our role as a responsible employer. This includes free day nursery, and full health and social insurance.



Living in Vienna

A Modern City in the Heart of Europe

The combination of high political and social stability, affordable cost of living, excellent infrastructure, and an outstanding cultural offering speaks for the city. Mountain spring water straight from the tap, high-quality public services, expansive green areas— all this and more lets you feel at home right away.

With a metro population of 2.6 million and a GDP of €90+ billion, Vienna is Austria's cultural, economic, and political center. The bustling city is rich in history and culture and known for its high quality of living and unique heritage in music and the arts. Vienna is innovative, young and forward-thinking, and leads the 2019 Smart City Strategy Index.



Vienna is ...

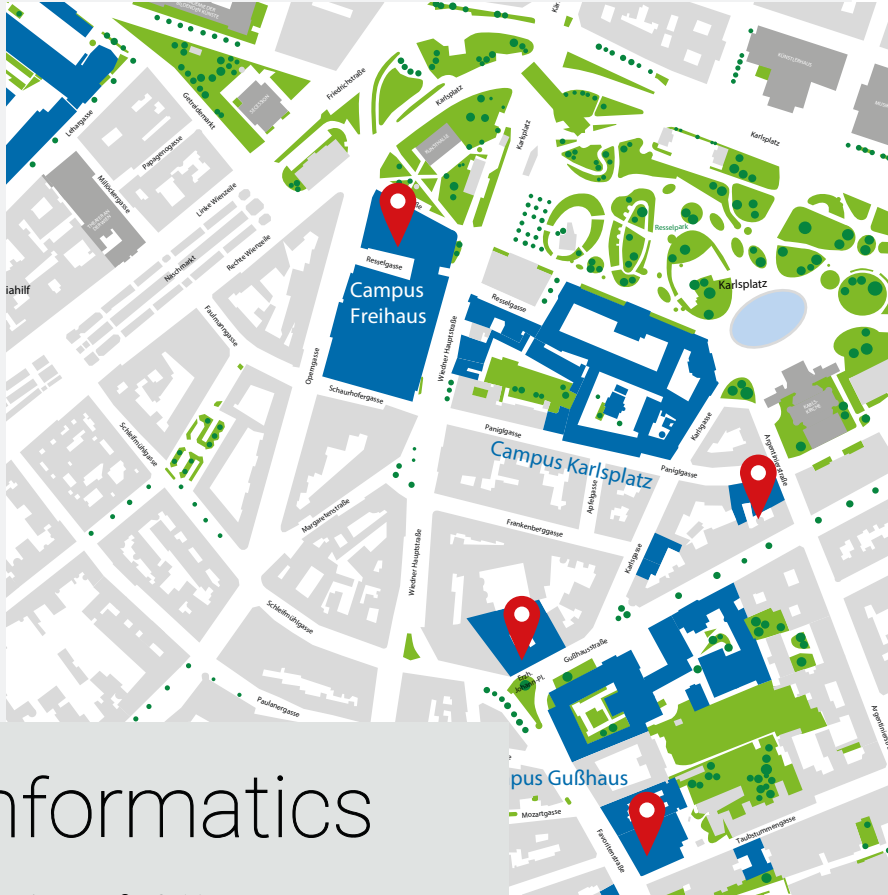
... **the sixth-largest city in the EU** and the second-largest in the German-speaking world. Vienna is known for its economic wealth (fifth-wealthiest city in the EU) and significant industry sector—especially in R & D and information technologies.

... **young, innovative, and successful.** There are more than 200.000 university students studying at 15 universities, making it the number 1 university city in the German-speaking world. Vienna is a European hotspot for start-ups and an ideal breeding-place for innovation.

... **internationally recognized for its unmatched quality of living.** Again and again, several international organisations named Vienna the „most liveable city in the world“. In 2019, Mercer named Vienna the city with the world’s highest quality of living for the tenth consecutive year.

... **a European research epicenter.** In 2020, there were 1.560 research organisations (848 companies), representing 31% of all such institutions in Austria, which employed 46.000 people. 30%, or €3.3 billion, of Austrian R & D funding was invested in Vienna.

... **a global capital of the Arts.** There are over 120 theaters. Vienna is famed for its rich tradition in classical music. There are over 160 museums, amongst them the Kunsthistorisches Museum, one of the world’s largest and most important museums, the Albertina and the Museum of Modern Art.



Informatics

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