

INFORMATION FOR APPLICANTS

**TENURE TRACK
PROFESSORSHIP
MACHINE LEARNING**



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EXECUTIVE SUMMARY

The Faculty of Computer Science and Biomedical Engineering at Graz University of Technology is seeking applicants for the position of a **tenure track professorship for Machine Learning at the Institute of Theoretical Computer Science (IGI)**.

The Faculty of Computer Science and Biomedical Engineering at Graz University of Technology is committed to excellence in research and teaching. The faculty's research activities cover a broad spectrum of topics that are reflected in its main research areas, **Biomedical Engineering, Safety and Security, Intelligent Systems and Visual Computing**. We are proud of our outstanding applied and fundamental research expertise and promote interdisciplinary projects. Moreover, our faculty fosters a close dialogue with industry and encourages and supports the creation of spin-off companies.

We are looking for outstanding candidates with a research focus in the field of Machine Learning methods. Specific research topics include, but are not restricted to, the development and analysis of machine learning algorithms and the development of neuromorphic learning algorithms.

GRAZ UNIVERSITY OF TECHNOLOGY


In world-wide competition with comparable institutions, Graz University of Technology pursues top teaching and research in the fields of the engineering sciences and the technical natural sciences. Knowing about the needs of society and the economy is an integral part of putting together excellent education and training programs. Ultimately, the quality of the education and training at Graz University of Technology is carried by the strength of its knowledge-oriented and applied research.

DEPARTMENT OF COMPUTER SCIENCE & BIOMEDICAL ENGINEERING



Computer science is one of the fastest growing and most innovative sectors. This dynamic is also reflected at the TU Graz. With its **47 professors** and 10 institutes, the Department plays a central role within the university and focuses its research on four research fields **Intelligent Systems, Visual Computing, Security & Safety, and Biomedical Engineering**. The Department's scientific achievements are remarkable: apart from employing three of the most cited researchers at TU Graz, it has brought out **three ERC and three Austrian START grant recipients** and is represented in major scientific rankings such as the Performance Ranking of Scientific Papers of the National Taiwan University. Moreover, the Department leads an FWF-funded national research network, a Christian Doppler Laboratory, a COMET Competence Center and acquires significant funding from EU and national sources.

As an innovation engine, the Department significantly contributes to the economy and has tremendous growth potential, with **30 start-ups with more than 1000 employees** to attest to that. The services of the Department have a great impact on TU Graz: its top position in international research and teaching, its visibility and effect on the society, its internationalizing PhD and Master studies, its inter-university cooperation and its industrial networking. The new professorship will be anchored in the Department of Computer Science and Biomedical Engineering and will strengthen the competence field „**Intelligent Systems**“.

The background of the entire page is a blue-tinted photograph showing several hands shaking in a group, symbolizing collaboration and agreement. The hands are positioned in the center and lower half of the frame, with some hands reaching from the left and others from the right.

**“ THIS PROFESSORSHIP IS
A REINFORCEMENT FOR
THE DEPARTMENT.
IT STRENGTHENS EXISTING
RESEARCH EXCELLENCE IN
INTELLIGENT SYSTEMS
AT TU GRAZ.”**

**RODERICK BLOEM
DEAN, DEPARTMENT OF COMPUTER SCIENCE AND
BIOMEDICAL ENGINEERING AT TU GRAZ**

TENURE TRACK PROFESSORSHIP FOR MACHINE LEARNING



The advertised position is a tenure-track career position for an initial period of 6 years (pursuant to § 99 para. 5 of the Universities Act). After the conclusion of a qualification agreement, the job holder is appointed as **Assistant Professor**. After a positive evaluation of the qualification agreement, the position will be turned into a permanent position as **Associate Professor**. After a further competitive procedure, the promotion to **Full Professor** is possible.

Graz University of Technology provides excellent working conditions in a lively scientific community combined with the outstanding quality of living of the Graz area.

The position will be paid according to category B1 of the collective agreement for employees of Austrian universities, stipulating a gross salary of € 4.214,50 (14 x per year, including social and health insurance).

We are seeking a candidate with proven scientific expertise who will represent the field of Machine Learning in research and teaching. The successful candidate will complement existing strengths at the institute and be an engaged teacher in the computer science programs at the bachelor, master, and PhD level. The professorship includes establishing an independent research group. In addition, Austria offers many funding opportunities. In fact, with an R&D rate of more than 5%, Styria is one of the most research-intensive regions of the European Union.

INSTITUTE OF THEORETICAL COMPUTER SCIENCE



The **Institute of Theoretical Computer Science** was founded in 1992 to investigate fundamental problems in information processing such as the design of computer algorithms, the complexity of computations and computational models, machine learning, neural networks, and the complexity of learning algorithms. The institute has developed world-class expertise in the field of computational neuroscience. One of its main research foci is information processing in biological neural systems and its application to neuromorphic hardware. This expertise is applied by the institute in the **Human Brain Project**, a flagship project of the EU, and in cooperations with major IT companies such as Intel.

In education, the institute is responsible for courses and seminars that introduce students into the basic techniques and results of theoretical computer science. In addition it offers advanced courses, seminars and applied computer projects in machine learning, neural networks, and computational neuroscience.

igi.tugraz.at



WHY GRAZ?

CULTURAL AND UNIVERSITY TOWN IN THE
STYRIAN TUSCANY. WITH PLENTY OF SUN!

CITY OF KNOWLEDGE

GRAZ HAS BEEN A UNIVERSITY TOWN SINCE 1585

Know-how from Graz goes international. Six universities with more than 16 faculties form the basis of the excellent international reputation of Graz as a research and academical location. With nearly 60.000 students of 290.000 inhabitants, Graz more than deserves the title “student town”.

CULTURAL CAPITAL

CITY OF CONTRASTS

Graz, the exciting city of culture, and particularly its historic city centre, offers the ideal location to stage seminars, trade fairs or conferences. It is not by chance that Graz is a UNESCO World Cultural Heritage site. The historic city centre around Schlossberg hill has been growing for centuries and became a township well worthy of admiration. Since the Middle Ages, the unique and well preserved architectural styles spanning from Gothic, Baroque, Renaissance, Art Nouveau and, of course, the modern, have not only seen an increase in value but are also indicative of a sense of tradition and art. In fact, contemporary art and architecture enrich the cultural scene as much as classical culture: the Graz Opera House, theatres and festivals of classical music. In 2003, Graz was also acclaimed European Capital of Culture. “The Friendly Alien” art centre and the Island in the Mur still bear witness to that year of celebration.



CAPITAL OF CULINARY DELIGHTS

MEET WITH DELIGHT

Styria offers many local food specialties, like Styrian pumpkin seed oil, Käferbohnen beans, Grazer Krauthäuptel lettuce, and award-winning wines. The people of Graz have a unique gift for enjoying life and the Mediterranean atmosphere is palpable everywhere.

Sunny spots in cheery wine gardens, promenades in the historic city centre and narrow, atmospheric alleyways, combined with over 2,300 hours of sunshine convey a southern European flair.

CONFERENCE VENUE GRAZ

WHERE SCIENCE MEETS ART, CULTURE AND PASSION

Organisers of scientific conferences in particular have appreciated Graz as a conference destination for many years. Being Austria's second largest city as well as an important research and business location, Graz has, with good reason, evolved into a renowned conference venue that enjoys an excellent international reputation. Every year, approximately 45000 conference guests make use of the historic and modern congress centres. They appreciate the city's easy accessibility, as much as its sophisticated cuisine and famous Austrian hospitality. A variety of supporting programmes and day excursions, served with Styrian delicacies and regional wines, add culinary value to any event. Worth mentioning is the pleasant size of the Styrian capital. In fact, many of the excellent hotels are within walking distance of the conference centres. The rich choice of sights and cultural events is another decisive reason for choosing Graz.



REQUIREMENTS FOR CANDIDATES

- A relevant national or international university education with a completed doctoral/PhD degree,
- Outstanding achievements and potential in research, excellent publication activity and international reputation.
- International experience in the form of a PhD or PostDoc position at an internationally recognized university or research center.
- Experience in the design and implementation of international research projects as well as willingness and ability to establish and lead a research group.
- Enthusiasm for excellent teaching, teaching experience or a teaching concept as well as the ability and willingness to teach in all curricular stages (Bachelor, Master, Doctorate), supervise theses and promote young scientists.

To ensure effective international representation of the research group and its work, excellent spoken and written competence in English is required. Specifically, willingness to teach courses in English is expected. Fluency in German or the willingness to acquire it is also required. The successful candidate is also expected to transfer her/his residence to the area of Graz.

Graz University of Technology aims to **increase the proportion of women**, in particular in management and academic staff, and therefore qualified female applicants are explicitly encouraged to apply. Until a balanced ratio of men and women has been achieved at the university, preference will be given to women if applicants are equally qualified.

Graz University of Technology **actively promotes diversity and equal opportunities**. Applicants are not to be discriminated against in personnel selection procedures on the grounds of gender, ethnicity, religion or ideology, age, sexual orientation (Anti-discrimination). People with disabilities who have the relevant qualifications are expressly invited to apply.

YOUR APPLICATION

Interested applicants are requested to send a detailed application in electronic form, quoting the **position identification number 7080/19/022**. The application should include

- a filled application form (available via bit.ly/ml_form),
- a resume (with copies of diplomas),
- a list of publications with copies of the 5 most important publications,
- a research statement describing past and planned research activities (5 pages max.), and
- a teaching statement (5 pages max.) and evaluations of past teaching activities (if available).

Send all of the above at the latest by

26 November 2019

(email timestamp)

per email to the Dean of the Faculty of Computer Science and Biomedical Engineering at Graz University of Technology, **Roderick Bloem** (applications.csbme@tugraz.at).

The hearings for the professorship will take place in the week from **10 February 2020**. Candidates are asked to be available for interviews in this period.

For further questions please contact **Robert Legenstein** (robert.legenstein@tugraz.at).

**APPLY
NOW!**





**APPLY
NOW!**



CONTACT

Candidates should submit their detailed application to the Dean of Computer Science and Biomedical Engineering, Prof. **Roderick Bloem** (applications.csbme@tugraz.at).

For questions please contact Assoc.Prof. **Robert Legenstein** (robert.legenstein@tugraz.at).

More on csbme.tugraz.at



www.tugraz.at