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FEMALE TENURE TRACK PROFESSORSHIP CRYPTOGRAPHY
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The Faculty of Computer Science and Biomedical Engineering at Graz University of Technology is seeking applicants for the position of a tenure track female professorship for Cryptography at the Institute of Applied Information Processing and Communications (IAIK).

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 the establishment of spin-offs.

We are looking for an outstanding candidate with a research focus on cryptography. The position is open for all aspects of cryptography ranging from the design and analysis of cryptographic primitives/protocols to application and implementation aspects. We offer an interesting research environment, research questions with practical relevance, and integration in a motivated team of researchers and developers.
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 21 professors and 11 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 Computational Life Sciences. 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 „Security & Safety.“
“THIS PROFESSORSHIP IS AN ESSENTIAL ELEMENT OF THE SCIENTIFIC AND STRATEGIC ORIENTATION OF TU GRAZ.”

HARALD KAINZ
RECTOR GRAZ UNIVERSITY OF TECHNOLOGY
FEMALE TENURE TRACK PROFESSORSHIP FOR CRYPTOGRAPHY

The new professor for Cryptography will initially be employed for six years as a University Assistant with Doctorate, 40 hours per week according to § 99 para. 5 of the Universities Act. The successful candidate is expected to start on 01.04.2019 at the Institute of Applied Information Processing and Communications.

Upon agreement on a qualification agreement, the candidate will be appointed as assistant professor. As soon as the qualification agreement has been fulfilled, the position will be converted into a tenured position as associate professor.

We are seeking a candidate with proven scientific expertise who will represent the field of Cryptography 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 administrative personnel and PhD positions that are paid by the university. In addition, Austria offers many funding opportunities and there are many potential industrial cooperation partners directly in the area of Graz. In fact, with an R&D rate of more than 5%, Styria is one of the most research-intensive regions of the European Union.
With 30 years of research in IT security, the Institute for Applied Information Processing and Communications (aka IAIK) is a major player in the field. More than 60 researchers work on topics like security architectures, side channels, cryptography, formal methods, or e-government. Among the recent sparkling highlights of IAIK’s research are the processor vulnerabilities known as "Meltdown" and "Spectre". IAIK cryptographers have contributed to most major competitions in cryptography, like AES, SHA-3, and CAESAR; these contributions were always shortlisted or even won the competition.

The courses of IAIK typically are among the best evaluated of the computer science curricula. At bachelor's level, these courses are computer organization, operating systems, computer networks, systems programming, logic and computability, and information security. The courses at master's level are strongly influenced by IAIK's current research. IAIK also hosts LosFuzzys – a very active group of students who are among the top 50 teams worldwide in capture-the-flag competitions.
CURRENT FACULTY AT IAIK

Prof. Roderick Bloem  
Formal Methods and Security

Ass. Prof. Daniel Gruss  
Microarchitectural Security

Prof. Stefan Mangard  
Embedded and Hardware Security

Prof. Reinhard Posch  
E-Government

Prof. Christian Rechberger  
Cryptography
Information security is part of three curricula at Graz University of Technology:

- Computer Science
- Information and Computer Engineering
- Software Engineering and Management

Currently, about 2700 students are enrolled in the corresponding bachelor and master programs. The education in information security starts with a compulsory 7 ECTS course in the bachelor program and then continues with more than 10 specialized elective courses during the master program.

There is the opportunity for the new professor in information security to teach one of the existing courses as well as to establish new courses in information security. Teaching is done in English or German at the bachelor level. The master programs are all in English.
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.
WELCOME TO GRAZ!
"THE PROFESSORSHIP IS A REINFORCEMENT FOR THE DEPARTMENT OF COMPUTER SCIENCE AND BIOMEDICAL ENGINEERING AND IT EMPHASIZES THE RESEARCH EXCELLENCE AT TU GRAZ."

HORST BISCHOF
VICERECTOR, GRAZ UNIVERSITY OF TECHNOLOGY

APPLY NOW!
REQUIREMENTS FOR CANDIDATES

- Research focus on an area of cryptography that strengthens the existing research at the institute
- Excellent scientific track record with publications at international top conferences/journals
- Motivation, experience and didactic skills for teaching in English
- Experience in the acquisition or management of research projects
- Well established in the international scientific community

Very good English language skills and the willingness to learn German are required. Relocation to the greater Graz area is also expected.

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 and who have the relevant qualifications are expressly invited to apply.
APPLICATION PROCESS

Applications with relevant documents (curriculum vitae incl. copy of all certificates, summary of scientific work in teaching and research) should be submitted at the latest by

03 December 2018
(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) quoting the
position identification number 7050/18/013.

The hearings for the professorship will take place in the weeks of 4 February to 15 February 2019. Candidates should be available for interviews in this period. For further questions please contact Frank Kappe (fkappe@tugraz.at).
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 Prof. Frank Kappe (fkappe@tugraz.at).