

Munich, August 2023

Are you passionate about novel communication concepts and the future of wireless communication? Do you want to be part of a team that is researching and designing next generation 6G wireless communication systems? If so, we have an exciting opportunity for you!

The Chair of Theoretical Information Technology offers a position in the 6G-life Research-Hub "Digital Transformation and Sovereignty of Future Communication Networks" (www.6g-life.de) as

Research Associate (f/m/d) Physical Layer Security

Subject to personal qualification, employees are remunerated according to salary group E 13 TV-L. The position is funded until August 2025 with the possibility of an extension.

Security is an essential feature of current and future communication systems. Physical layer security is a novel approach to generate security directly on the physical layer. It is provably safe, even against quantum computer attacks. In the project you will

- Design, implement, and analyze physical layer security techniques
- Extend and further develop our existing hardware demonstrator
- Employ techniques such as mmWave, MIMO, and RIS
- Perform simulations and experiments to study the performance
- Write publications and present your research results on international conferences.

To be qualified for this position, you should have

- Excellent university degree in electrical engineering, communications engineering, physics, computer science, mathematics (or similar)
- Experience with RF hardware (spectrum analyzer, network analyzer, etc.) and software defined radios
- Programming experience in Python, MATLAB, or C/C++
- Goal-oriented, independent, and structured work style

Following points are considered a bonus

- FPGA programming experience
- Prior knowledge in signal processing, wireless communication systems, and information theory

Our offer

- Research on current topics in an inspiring international working environment
- Up-to-date hardware to conduct experiments
- Full-time position (E13 TV-L) with the aim of earning a doctoral degree

How to apply

Please send us your application by e-mail (jobs.lti.cit@tum.de with "6G-life PHY" in the subject line), including the following documents:

- Curriculum vitae, copies of relevant certificates and diplomas, contact information for two references
- Short description of your research interests and your motivation for the application
- Master thesis and (if available) up to 3 publications

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General Information

The Technical University of Munich (TUM) is aiming to increase the number of women employees, and applications from women are expressly welcomed. Applicants with disabilities, with essentially the same suitability and qualification, will be preferred. As you apply for a position at TUM, you will provide personal data; please note our data protection information according to Art. 13 Data Protection Basic Regulation (DSGVO) on the collection and processing of personal data in connection with your application, <http://go.tum.de/554159>. By submitting your application, you confirm that you have taken note of the data protection information of the TUM.

Contact

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