Munich, December 2021





The Chair of Theoretical Information Technology has an immediate opening for a

# Doctoral student: 6G Technologies for Secure and Robust Communication (E13 TVL) (f/m/d)

Within the 6G-life project, transmission systems that go beyond Shannon's communication approach are to be developed, in order to achieve a more secure, efficient, and resilient communication in novel 6G systems. Key technologies such as massive MIMO, mmWave, machine learning will be used. The position is initially limited to three years. An extension is possible.

#### Content of the project and areas of responsibility

- Development and implementation of novel communication schemes (for secure and robust communication)
- Demonstration on real hardware (NI USRP prototyping platform)
- Analysis of jamming and stealth communication and experimental verification
- Publication and presentation of scientific results

#### Your qualifications

- Above-average university degree in electrical engineering, communications engineering, computer science, physics (or similar)
- Interest in the theory of novel communication concepts as well in their practical implementation
- Thorough knowledge of communications engineering and information theory
- Software experience: MATLAB, Python, C/C++ desirable
- Familiarity with state-of-the-art machine learning tools and GPU programming
- Goal-oriented, independent and structured work style

#### Our offer

- Current research topic in a challenging international working environment
- Full-time position (E13 TVL) with the possibility of earning a doctoral degree

# To apply

Please send us your application by e-mail (jobs.lti@ei.tum.de) with 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
  The description of the description in filled.

Application deadline: open, until the position is filled

## **General Information**

TUM is aiming to increase the number of women employees, and applications from women are expressly welcomed. People with disabilities, with essentially the same suitability and qualification, will be preferred. As you apply for a position at the Technical University of Munich (TUM), you 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.

## **Technical University of Munich**

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