

**PhD Student (m/w/d) for Privacy-Preserving Biometric Recognition
at the Research Institute CODE**

(funded at federal salary level 13 TVöD)

We are looking for a PhD student with an initial contract for 2 years with possibility of extension to a total of 4 years on a full-time basis.

The **Research Institute “Cyber Defence und Smart Data” CODE** (www.unibw.de/code), established in 2017, with currently 15 professorships and over 200 researchers, is being expanded to one of the largest European research institutes for cyber security.

The newly established Research Group **“Biometrics & Machine Learning” (BioML)** led by **Marta Gomez-Barrero** is looking for a PhD student in Computer Science on **biometric template protection**. The goal is to develop new algorithms to increase privacy protection within biometric recognition systems, based on the state of the art of both biometric recognition (e.g., **deep learning** architectures) and modern cryptography (**post-quantum cryptography, differential learning**).

Your tasks:

- Research, development and evaluation of methods for the protection of biometric data: a combination of machine or deep learning and cryptographic methods.
- Literature research
- Publication and presentation of scientific results at international conferences and in relevant journals
- Contribution to the teaching activities of the group (seminars, supervision of student work)

Requirements:

- Master's degree (or equivalent) with a good grade in Computer Science or a similar discipline

What do we expect from you:

- Solid programming skills, ideally in Python
- Knowledge in the area of IT security, especially in machine or deep learning and cryptography
- Knowledge in the area of biometric recognition is an advantage
- Very good written and spoken English skills for working in an international environment
- Initiative and willingness to work independently adhering to scientific standards
- Openness and enthusiasm for innovative technologies, combined with the willingness to familiarize oneself with individual areas of specialisation
- Critical thinking, quality-oriented and independent work, professional commitment. Willingness to learn and work in a team, as well as creativity

What do we offer:

- an optimal research and supervision environment for doctoral studies and scientific advancement, excellent networking opportunities
- pleasant working environment in a friendly and committed team
- state-of-the-art IT equipment
- active promotion of your scientific development and your PhD
- multi-year contract with the aim of extension according to the Wissenschaftszeitvertragsgesetz (German Science Contract Act)
- possibility of further education and certification in higher education didactics
- a grouping into pay group 13 is carried out under consideration of § 12 TVöD with regard to the actual activities to be carried out and the fulfillment of the personal or collective agreement requirements.
- mobile working / offer of teleworking possible after consultation with the research group leader
- a campus with a very good infrastructure, in-house kindergarten (parents' initiative), a family service center with advice and assistance for university employees to better reconcile family, care and professional life, as well as attractive sports and leisure facilities

Employment can also be part-time if desired. The University of the Federal Armed Forces Munich aims to increase the proportion of female scientists and employees; applications from women are expressly welcomed.

In accordance with Social Code IX and the Equal Opportunities for Disabled Persons Act, we expressly welcome applications from severely disabled persons; individual consideration is given to whether the requirements for advertising are met.

The Bundeswehr supports the goals of the National Integration Plan and welcomes applications from people with a migration background.

Are you interested?

Then send your application with the usual documents (cover letter, CV, references, certificates) in PDF format by e-mail with the subject: "Application Privacy-Biometrics" to:

Prof. Dr. Marta Gomez-Barrero (marta.gomez-barrero@unibw.de)

With your application you agree that your personal data will be stored, processed, and forwarded to the departments involved in the application process for the purpose of the application. You can find more information on data protection at the following link: <https://www.unibw.de/home/footer/datenschutzerklaerung>

We are looking forward to hearing from you!