

# **Job Vacancy**

The University Hospital Essen offers first class medical services in the Ruhr metropolis. Every year, 225.000 patients are treated in 30 clinics, 27 institutes and specialized centers. The over 8.000 employees offer medical care with state-of-the art diagnostics and therapies, which meet highest international standards. Patient care is connected with basic and translational research at an internationally competitive level.

## Research Associate (m/f/d)

(pay grade: EG 13 TV-L)

Work Area: Institute for Artificial Intelligence in Medicine (IKIM) Job ID: 1139b Start Date: Next possible date Work Scope: Full-time employment / 38,5h Contract Type: Temporary Contract duration: 31.10.2024

## Your tasks:

• Development of novel and theoretically sound methods of federated learning on medical data

• Theoretical and empirical analysis of learning algorithms – with a focus on Deep Learning – in federated learning (generalization, transferability, privacy compliance)

Publication of research results at leading conferences and journals in English

 Implementation and empirical analysis of developed methods in a federated learning platform on medical use cases

## Your profile:

• Excellent university degree (diploma or master) in computer science, mathematics, physics or comparable qualifications

• Excellent knowledge and practical experience in Machine Learning, especially in Deep Learning

• A high level of abstraction and mathematical creativity

• Excellent programming skills (Python preferred) and experience with common program libraries (PyTorch, TensorFlow, sklearn, etc.)

• High motivation and the ability to work independently on complex problems and error analyses

## Look forward to:

- A local settlement at the Ruhr-Universtität Bochum
- A secure job in the public service of the state of NRW
- Fair payment in accordance with the collective wage agreement (TV-L) incl. annual bonus payment and supplementary company pension scheme
- 30 days of vacation per calendar year (for a full-time position)
- Interdisciplinary work with colleagues from other departments
- · Working with modern equipment and certified quality standards





• Family-friendly corporate culture, e.g. company daycare center, vacation program for school-age children, advice and support from the Employee Service Office in all life situations

• Wide range of training and continuing education opportunities, e.g. at the Training Academy of UK Essen

• Active health management, e.g. company integration management, vaccinations, promotion of sports activities

• Attractive fringe benefits, e.g. job ticket for public transport, reduced-price canteen meals, community events, accommodation in student residences

### **General conditions:**

- The pay grade classification depends on the personal and collective legal prerequisites.
- The University Hospital Essen is an equal opportunity employer. Female scientists are particularly encouraged to apply.
- The participation in secondary employment depends on the "Hochschulnebentätigkeitsverordnung" of North-Rhine Westphalia.
- Disabled applicants will be preferentially considered in case of equivalent qualification.
- The position is also available as part-time employment.

### Contact person and further information about the position:

You will find detailed information on the job advertisement and contact persons behind the button - Apply now:

#### https://bewerbung-karriere.ume.de/Vacancies/861/Application/CheckLogin/1

We use your data exclusively for application purposes in accordance with the applicable data protection regulations. Further information can be found in the privacy statement on our homepage at: <u>www.uk-essen.de</u>.

