



Making crime-fighting successful is our goal. In many areas, the services of our approximately 1,800 employees are a decisive basis for preventing and solving crime in NRW. You, too, can be part of this.

We are looking for the next possible date for several

# Research Fellows (f/m/d) for Department 41, Subdepartment 41.3 "Software Development" Reference number: 2022-Tarif-070

The position is to be filled for three years, with the possibility of extending this by two years. Therefore, the job is aimed at applicants interested in a doctorate.

The position will be graded up to pay group 13 TV-L, provided that the requirements under collective bargaining law and personal qualifications are met.

The cybercrime (CC) phenomenon is subject to constant and highly dynamic change. New CC phenomena are constantly establishing themselves and will continue to do so in the future. Law enforcement agencies must quickly absorb these developments and respond to them adequately. That is why we are building up our competencies in the areas of big data analytics and artificial intelligence (AI) with a new team of AI experts (f/m/d).



This team will become part of the Cybercrime Competence Center of the LKA NRW. The Cybercrime Competence Center consists of investigative commissions for outstanding proceedings in the field of computer crime, the Child Pornography Evaluation Unit, the State Central luk Investigation Support Unit, the Lawful Interception Unit, and services for the evaluation, analysis, and prevention of computer crime.

The subdepartment 41.3 designs, implements, tests, and supports software solutions for the NRW police. We work with agile methods (e.g., based on Scrum), and our requirements for the project team members are correspondingly agile.

We will be happy to answer any questions you may have about your future job and our subdepartment. Please do not hesitate to contact us.

## What you can expect

- Scientific support for developing innovative and sustainable structures in the field of artificial intelligence at the LKA NRW, taking into account quantitative and qualitative methods.
- Publication activities in relevant journals with the aim of a doctorate as well as the support of the public relations work of the LKA NRW in the field of artificial intelligence
- Support of AI experts in testing and evaluating commercial, freely available, or self-developed
  AI solutions for police needs, as well as in the development of AI models and their training
- Assist in the development of a training and testing database and the maintenance of benchmark datasets for product and development testing
- $\checkmark$  Support the monitoring and maintenance of the AI methods used

# Mandatory skills

- ✓ Completed university studies in computer science, physics, or a comparable course of study in the natural sciences (diploma or master's degree, DQR level 7)
- Provable experience in the field of artificial intelligence or machine learning through relevant theses, courses, student activities, or professional experience
- Proficiency in joint presentation techniques and the preparation of scientific research topics (e.g., in the context of presentations, posters, or talks)
- ✓ Good programming skills in C#, Java, Python, or comparable languages

## What we would like to see

✓ Excellent knowledge of German and English



- ✓ Experience with current artificial intelligence technologies such as Keras, scikit-learn, PyTorch, or TensorFlow
- ✓ Experience in computational linguistics (natural language processing), computer vision, or automatic speech recognition
- ✓ Experience in project management and project-related work
- ✓ Experience with agile systems, for example, Scrum or XP

# In addition, you bring the following skills with you

- ✓ Ability to work in a team
- $\checkmark$  Willingness to cooperate and ability to deal with conflicts
- $\checkmark$  High desire to innovate and learn
- ✓ Independence and result orientation

To work for the North Rhine-Westphalia police, you must undergo a security check following the NRW Security Check Act (Sicherheitsüberprüfungsgesetz NRW - SÜG NRW)<sup>1</sup>, which you and your wife/husband or your partner with whom you live in a marriage-like relationship must agree to.

The performance of the job in part-time employment is possible in principle.

## What we offer

- excellent technical equipment
- modern working environment
- opportunities for further training
- flexible working time models
- work predominantly remote
- good compatibility of family & career

We promote the professional development of women. We, therefore, particularly welcome applications from women. Women are given preferential consideration by the provisions of the LGG NRW and the LBG NRW unless reasons relating to the person of a competitor prevail.

We endeavor to recruit severely disabled persons and persons of equal status within the meaning of Section 2 of the Social Code IX (SGB IX); applications from this group of persons are expressly encouraged.

As part of the work-life balance, we offer a parent-child office, child holiday care, and proper and reliable childcare support through BUK-Familienservice (www.buk-familienservice.de).

<sup>&</sup>lt;sup>1</sup> Security Clearance Act of North Rhine-Westphalia dated 23.02.2022



Please note that when you submit your application, the data required for the selection process will be temporarily stored following Section 18 (1) of the German Data Protection Ordinance (DSGVO).

## **Data protection notice (link)**

In the context of the application process, attention is drawn to the applicability of Section 18 of the Data Protection Act of North Rhine-Westphalia (in German)

Information on the processing of personal data by the LKA NRW for job advertisements

#### Have we sparked your interest?

Then send your application by e-mail with the subject Wissenschaftliche Mitarbeit (m/w/d) KI TD 41.3 and quoting the reference number 2022-Tarif-070 in one pdf file to za21BewerbungFuest.LKA@polizei.nrw.de by 05.02.2023.

#### Please include the following with your application:

✓ Cover letter

✓ Employment references

✓ Resume

✓

- School & professional qualifications
- Certificates of further education and training
- Please note that the date of receipt of the application by the LKA NRW is decisive for meeting the deadline, as mentioned earlier. Submission of the original certificates may be expected at a later

date, and missing documents will not be requested. The application documents submitted are valid.

## Your contact persons



We look forward to receiving your application.