Job requirements W2-Professorship for Smart Mobility Components

Application deadline: September, 26 2023

The professorship is located in the Institute of Computer and Communication Technology.

Starting date: at the earliest opportunity

The general legal requirements in compliance with section 36 of the North Rhine-West-

phalia Higher Education Act (Hochschulgesetz – HG) are as follows:

- 1. University degree
- 2. Proven track record of teaching ability. In exceptional cases, the teaching ability can be proven during the first year through a probationary period.
- 3. Special proficiency in scientific work, usually demonstrated by the quality of the doctorate.
- 4. A strong track record in the development and application of research findings and methods, gained during a minimum of five years of professional employment in a relevant field at least three of these five years outside of the higher education sector. If the applicant does not have such a strong track record as mentioned above, then it is necessary to have a German "Habilitation" or additional academic qualifications equivalent to a "Habilitation" (the postdoctoral qualification in Germany, which entitles the person to research at an expert level and teach his or her academic subject(s) at university). To prove that the applicant has such an equivalent qualification, a professor's assessment, which shows the applicant's competence, is to be enclosed with the application. You can also submit the report within 14 days of the application deadline at the latest. Such a professor must be from a university, or from a university of applied sciences (Fachhochschule) and in the latter case the professor must have a "Habilitation". The applicant may also provide evidence of a positively evaluated junior professorship.

Professional, didactic and methodical profile:

Professional Competence

You have a university degree in a STEM subject and a doctorate, preferably in computer science from the field of Smart Mobility Components. You have at least five years of relevant professional experience, of which you worked at least three years outside the university sector.

Technical competences

You have been intensively involved with Smart Mobility Components in theory and practice for several years and can convincingly represent at least one of the following subfields from your own theoretical knowledge foundation and your own practical development experience in research and teaching:

- Software for mobility components
- Communication of moving objects
- Digital Twins in the mobility sector
- Artificial intelligence for intelligent mobility
- (Networked) sensors and control systems for intelligent mobility solutions

Research competence

You have a pronounced interest in research and transfer projects, which is documented in scientifically recognizable publications or demonstrated by developments you have contributed to at least one of the subject areas named in section "Technical Competences". Ideally, you already have a cooperation network for research and transfer projects. You intend and are clearly motivated to acquire third-party funding from national and international public and private funding bodies. Ideally, you have experience in managing projects, in collaborative research and in interdisciplinary research cooperation. Commitment

Technology Arts Sciences TH Köln

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International competence

A good command of English is expected, as well as the willingness and competence to hold lectures in English. You are willing to actively engage in establishing and maintaining sustainable contacts with foreign universities, especially in English-speaking countries, to motivate students of the TH Köln to spend time abroad and to support them during this time and to create a conducive environment for visiting students. You possess competences for international cooperation and can prove this through stays abroad or international contacts and cooperations as well as publications. If you do not have a first-language command of the German language, you will have German language competences at GeR level B1 at the time of the interview and GeR level B2 when you start work. At the end of the probationary period, you will be expected to have acquired GeR level C1.

Didactic competences/communication skills

This professorship makes an important educational contribution to the Bachelor's and Master's degree programs in Computer Engineering and Electrical Engineering with courses in basic subjects such as practical computer science 1 and measurement technology as well as advanced subjects on special topics in Smart Mobility Components. Didactic skills are therefore of great importance. Ideally, you already have experience in teaching and can prove this, for example through teaching evaluations. An understanding of didactic principles relating to the interaction of learners and teachers is required, and competences in the area of project-based teaching and/or research-based learning are desirable. Many questions of "Human-Technology Cooperation" are of great relevance in the professorship's area of responsibility, in particular, those relating to the impact of conditions created by specific cultural settings. You use your intercultural and language skills to communicate appropriately and convincingly in public, vis-à-vis public bodies and in cooperation with industrial companies. You understand how to take advantage of the great freedom to design your own the professorship offers through elective modules in bachelor's and master's programs in coordination with your colleagues.

Management competence

Your teaching and research practice is characterized by systematic planning - which includes taking into account the available capacities and resources. You set priorities and develop solutions for the realization of goals. You formulate goals, can distinguish between what is desirable and what is achievable and take on personnel responsibility. You think across disciplines and departments, for example when participating in expert committees and use university resources economically. You are not discouraged by failures but see them as a challenge.

Social skills

You have the ability to actively shape social contacts, to work in a team-oriented manner and to cooperate both internally and across disciplines. This includes communication and cooperation with internal and external institutions as well as active collaboration and integration in working groups. You adapt quickly to new tasks and develop further technical aspects. You convince through your demeanor, well-mediated arguments and clear points of view. You meet deadlines and time limits. Your professional conduct is characterized by collegiality and integrity as well as the ability to deal with conflicts and the ability to be self-critical. You use your social and linguistic skills to communicate issues of social relevance to process control technology to the public in an appropriate and convincing manner.

Self-development skills

You are prepared to develop yourself personally and professionally on an ongoing basis. You always reflect on your actions and are prepared to accept constructive criticism and express it yourself. You are interested in topics that go beyond the field of Smart Mobility

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Components and are willing to face and take on changes and new tasks with commitment. You are aware of your strengths as well as your weaknesses and can work on and even compensate for them.

Any additional professional responsibilities not included in the professorship are subject to the regulations governing secondary employment.

With the advertisement of this position and the publication of the requirement profile, the TH Köln specifies which competences candidates have to possess in order to successfully fulfill the tasks of the professorship at the TH Köln. Depending on the focus of the professorship these competences are weighted and evaluated in the selection procedure. The pre-selection is based on the written application documents. Shortlisted candidates have to show the required competences in a lecture, a scientific presentation and a structured interview. The personal introduction is completed by an interview with a personnel psychologist. In case you are shortlisted and invited to a personal interview, you will be asked to submit a written teaching and research concept in advance. You will receive more detailed information with the invitation to the lecture, the scientific presentation and the structured interview.

Additional information

Place of residence

You are expected to move/relocate to the city in which your campus is located/situated or its greater area.

Remuneration

Professors are remunerated in accordance with the W2 remuneration scheme (The remuneration scale for North Rhine-Westphalia as well as information on the family supplement are available on the website of the North Rhine-Westphalia State Office for Salaries and Pensions – LBV NRW – at www.lbv.nrw.de). In addition to the family supplement, the remuneration provisions make allowance for other benefits (performance-related benefits), in particular benefits related to the appointment as well as benefits granted on the grounds of extraordinary contributions or for securing third-party funding for research purposes. The Provisions on Performance-related Benefits at Universities in North Rhine-Westphalia are in accordance with the law (Hochschul-Leistungsbezügeverordnung – HLeistBVO) of December 17, 2004. Additionally, Cologne University of Applied Sciences has introduced individual regulations in its guidelines on W2-remuneration. Detailed information on the W2-remuneration bracket is available here: <u>th-koeln.de/besoldung</u>

Employment as a civil servant or as a non-civil servant

Professors may only be employed as tenured German civil servants if they hold a full-time position and comply with all legal provisions (e. g. being younger than 50 years old). The possibility of becoming a tenured German civil servant is always determined on an individual basis, and candidates should therefore contact the Head of Division for lecturers and assistants in the human resources department (Ms. Sigrun Weber / Phone: +49 221-8275-3120 / Email: sigrun.weber@th-koeln.de). When employed under non-civil-servant conditions, professors will be remunerated in accordance with W2 gross remuneration. In contrast to tenured civil servant contracts, professors employed under such provisions are required to pay social security contributions.

Additional employment

Full-time professorship: additional employment of up to eight hours per week may be authorized in compliance with the legal regulations for North Rhine-Westphalia (thus permitting work in positions of practical relevance). If you work on a freelance basis with your own office, then this is subject to specific conditions as laid down in the legal stipulations on additional employment for university personnel.

Part-time professorship (less than 50 %): If your position as a professor comprises less than 50 %, the legal stipulations on additional employment are not applicable.

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Application information

Please apply via our application management system. Go back to the <u>job advertisement</u> and click here:

Technology Arts Sciences TH Köln

Apply here

Here we ask you for the personal data relevant for the processing of the application and to upload the following documents (maximum fill size 10 MB per file):

- cover letter
- photo (optional)
- curriculum vitae including list of publications and overview of the courses held (here or at the other documents)
- certificates (max. 5 files)
 - University certificates
 - job references or activity reports
 - certified translations in German or English for foreign certificates
- other documents
 - such as a list of publications
 such as an overview of the courses held (evaluation)

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