HOCHSCHULE
FÜR MUSIK
KARLSRUHE

The Karlsruhe University of Music is an artistic-scientific institution of international profile with an excellent reputation. The Institute of Music Informatics and Musicology is opening a position under supervision of Prof. Dr. M. Schumacher (Music Informatics) starting the academic summer term 2024 for a

research assistant (f/m/d) in the field of music informatics

with a scope of employment of 50% (19.75 hours per week). Remuneration will be up to pay group 13 TV-L according to qualifications. The position is limited to five years with the possibility of employment on a pro rata basis.

What you'll do:

- Research & Development on artistic and scientific projects with a focus on: immersive environments (XR), human-computer interaction, holophony/volumetric audio, high-level music and audio representations
- Development and maintenance of IT infrastructure (server administration, cloud systems, CMS, …)
- Teaching 4 SWS within the institute during the lecture period
- Supervision of student projects, theses and assistant work
- Organizational, administrative and logistical responsibilities in the areas of research, study and teaching
- Scientific writing, publication and dissemination of research in the academic community

Who you are:

- Master's degree in audio engineering, computer science, signal processing, robotics, or comparable fields
- In-depth theoretical and/or practical knowledge in one or more of the following areas:
    - Distributed sensor/actuator networks and embedded/physical computing
    - Immersive and smart environments (XR), multimodal interaction, perceptual coding/rendering
    - Capture, analysis/synthesis, reproduction of sound fields (beamforming, WFS, HOA)
    - Approaches for semantic and sparse signal modeling (ML, AI)
    - Symbolic music representations for computer-aided analysis and composition
- Knowledge of programming languages and DSLs for research and media programming (e.g. Lisp/CLOS, Python, JS, C++, Lua, Faust, Matlab, OpenMusic, Max/PD, Supercollider, Unity, etc.)
- Strong teamworking, communication and problem-solving skills for self-organized knowledge acquisition

What's a plus:

- Experience in scientific publishing (authoring & typesetting tools, editor/reviewer activities, etc.)
- Skills in organization and deployment of software projects (models, toolchains, GIT, etc.)
- Pedagogical knowledge and experience in university-level teaching and supervision
- Knowledge of IT, server administration (Unix), cloud services, etc.
- Experience in artistic-creative work and production. Musical practice.

You will be carrying out an exciting artistic-scientific activity in a transdisciplinary environment within a dynamic team equipped with excellent technical facilities. We provide options for simultaneously enrolling in a doctoral program as well as possibilities for realizing independent scientific and artistic research projects.

The position offers excellent work-life balance opportunities through flexible working time models, digital infrastructure and home office arrangements. The selection procedure is carried out in accordance with the provisions of the General Equal Treatment Act (AGG). Detailed information about the University is available online at www.hfm.eu. For further information, please contact Prof. Dr. Marlon Schumacher (schumacher@hfm.eu).

Please send your application with a CV, certificates, work samples and the usual documents in a single PDF file by 31 January 2024 to: stellen@hfm-karlsruhe.de.