

The LOEWE Center emergenCITY at Technische Universität Darmstadt invites applications for a position as

## **Researcher as Lab engineer**

to be filled as soon as possible. The fixed term contract is limited until December 31, 2023 with the possibility of extension.

The LOEWE Center emergenCITY is an interdisciplinary research center that was established at TU Darmstadt. The University of Kassel and the Philipps-Universität Marburg are partners. emergenCITY aims at investigating fundamentals, methods and solutions towards the resilience of future digital cities and especially the capability of Information and Communication Technology to resist, adapt, and transform in crisis situations.

The team includes 23 professors in the fields of computer science, electrical engineering, information technology, mechanical engineering, political science, history, architecture, business and law. The center consists of four Program Areas: Societal Aspects and Urban Planning, Information, Communication, and Cyber-physical Systems. For more information visit [www.emergencity.de](http://www.emergencity.de).

### **Tasks and Duties:**

Within emergenCITY, a research laboratory is being established at the TU Darmstadt. It brings together the program areas City and Society, Communication, Information and Cyber-physical Systems. The goal of the emergenCITY Lab is to evaluate and demonstrate the research results. Elements of the lab include wireless emergency networks, rescue robotics, resilient ICT solutions for digital cities (applications, services), resilient ICT for critical infrastructures (energy, water, traffic, etc.), future end-user devices, etc.

As a laboratory engineer you will participate in the development of the laboratory concept and are responsible for its implementation as well as the active support of research and scientific operations in the LOEWE Center emergenCITY and conduct your own research projects. Specifically, your tasks include:

- conception and establishment of a research laboratory for emergency networks, services, and applications in digital cities and the development of software and hardware to enable research experiments
- coordination of research projects and joint development of hardware and software as well as continuous assessment of the current state of research and collaboration in research projects
- Supervision of the regular operation of the laboratory including implementation tasks, prototypical realization of research results, setup of demonstrators
- Development and implementation of the complex, heterogeneous IT infrastructure of the LOEWE center emergenCITY
- Administrative tasks, including acquisition and management of hardware and software

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LOEWE emergenCITY offers you a creative environment in a young team of top researchers. The offers of the employer TU Darmstadt, such as targeted further education and training programs, are open to you. You will find excellent technical equipment and you will be involved in research and development in emergenCITY in your role as a laboratory engineer. The Technical University of Darmstadt is internationally oriented. Foreign candidates are explicitly invited to apply.

### Requirements

- Very good university degree (Master's or equivalent) in a relevant discipline related to the topic of emergenCITY (i.e. computer science, mathematics, business informatics, electrical engineering, information technology, industrial engineering etc.)
- Very good knowledge of embedded programming (C/C++) and very good knowledge of script languages
- Very good knowledge of LINUX (e.g. Debian, Proxmox, Ceph)
- Experience with embedded systems (hardware and software)
- Experience with the design and operation of networks
- Knowledge in the fields of Software-defined Radio (SDR), robotics or hardware/measurement technology for wireless networks is desirable
- Knowledge of application development and demonstrators desirable

The fulfillment of the duties likewise enables the scientific qualifications of the candidate.

The Technical University of Darmstadt intends to increase the number of female employees and encourages female candidates to apply. In case of equal qualifications applicants with a degree of disability of at least 50 or equal will be given preference. Wages and salary are according to the collective agreements on salary scales, which apply to the Technical University of Darmstadt (TV – TU Darmstadt).

By submitting your application, you agree that your data may be stored and processed for the purpose of filling the vacancy. Here you find our privacy policy: <https://www.tu-darmstadt.de/datenschutzerklaerung.en.jsp>

### Application Process

Please apply with the following documents:

- Cover letter stating your connections to the research in emergenCITY; focus on your strengths and topics of interest
- CV
- Degree certificates/ transcripts (Bachelor and Master)

Please send your application via E-Mail in one .pdf file to Anne Hofmeister, emergenCITY Management, [bewerbung@emergenCITY.de](mailto:bewerbung@emergenCITY.de). For specific questions concerning the research please contact Prof. Dr.-Ing. Matthias Hollick, emergenCITY Coordinator, [coordinator@emergencity.de](mailto:coordinator@emergencity.de).

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