

<https://www.iab-weimar.de/en/job/job-posting-2025-06-ptmt-wma/>

Research Associate (m/f/d) – Signal and Image Processing

Job-ID: 2025-06-PTMT-WMA

About Us

IAB Weimar is an innovative and successful industry-oriented research institute focused on developing new devices, processes, and materials for the construction sector. It is located in the culturally rich city triangle of Erfurt–Weimar–Jena.

To strengthen our Mechanical Engineering department, we are seeking to recruit a Research Associate in the field of Signal and Image Processing, with the option of becoming Deputy Head of Department, starting at the earliest possible date.

Your Tasks

- Exciting and challenging development and research tasks in electrical, plant, and process engineering, mainly in the fields of 3D concrete printing, mineral foam technology, and construction material recycling technologies
- Acquisition and evaluation of process variables ranging from analog and digital signals to bus systems (Modbus TCP/IP or other industrial bus systems)
- Development of project- and customer-specific image processing solutions (micro to macro in 2D and 3D – AI-based approaches can be applied in classification tasks), including:
 - Design of camera and lighting concepts
 - Configuration of test projects with in-house developed image processing software
 - Commissioning, calibration, and testing of the systems
- Optional: Participation in team leadership as Deputy Head of Department

Your Profile

- Successfully completed degree in Electrical Engineering, Physics, Mechatronics, Computer Science, or a comparable qualification with a focus on:
 - Basic methods and procedures of classical image acquisition and processing (e.g., preprocessing, feature extraction, measurements in 2D/3D, classification of properties of objects or object parts)
 - Experience in measurement data acquisition and processing (desirable)
 - Knowledge of signal acquisition and processing, especially vibration and acoustic signals, is an advantage
- Proficiency in LabVIEW/NI Vision and/or programming in C
- Practical/technical skills
- Enjoyment of solving IT-related challenges
- Strong communication and teamwork skills
- Good German skills (native speaker or at least level B2) and English skills (minimum level B1), spoken and written
- Independent and results-oriented working style
- Optional: Experience in personnel management

Contact person

Dr.-Ing. Justus Lipowsky
Head of research department
Process Technology
+49 3643 8684-156

Start of employment

at the earliest possible date

Duration of employment

permanent

Job location

IAB – Institut für Angewandte
Bauforschung Weimar gGmbH,
99428, Weimar, Thüringen

Working hours

Full-time (39 h) / part-time

Fields of expertise

Mechatronics / Electrical
Engineering / Computer Science

Date posted

27. August 2025

Our Benefits

- Permanent employment at an industry-oriented research institute
- Mobile working options and flexible working hours (flextime)
- Opportunities for continuing education and doctoral studies alongside your work
- Enhanced social benefits (company pension scheme, on-site kindergarten)
- Company bike leasing (BusinessBike, EuroRad, Linexo)
- Job ticket (Germany-wide public transport ticket)
- Company fitness membership (Hansefit)
- Special annual bonus
- 30 days of paid vacation

Application

Have we sparked your interest? Then we look forward to receiving your detailed application documents, including your salary expectations, at:

karriere@iab-weimar.de