



Darmstadt University of Applied Sciences is looking for a

Research Associate (75%)
Reference number: 385/2023 W-MD

starting from 01.01.2024 to 31.12.2026 in the **Department of Media** – Research Group Human-Computer Interaction & Visual Analytics.

Responsibilities:

- Scientific induction and research in areas relevant to the topic “AI/ML and Visual Analytics in the field of resource and water management in European agriculture”.
- Conceptualization and development of the backend of an AI-based modular framework for visual decision support for the EU research project “FARMWISE - Future Agricultural Resource Management and Water Innovations for a Sustainable Europe” (Horizon Europe – Research and Innovation Action - RIA) in collaboration with the project leadership and partners, including:
 - Development of solutions for impact assessment, diagnosis, and forecast, especially for
 - Learning scenarios (e.g., prediction algorithms for analyzing the short-, medium-, and long-term effects of hydrological variables)
 - Policy modeling
 - Data modeling
 - AI in Visual Analytics (e.g., identifying future scenarios by analyzing data, scenarios, and options)
- Planning, executing, and implementing of visual decision support systems through artificial intelligence, including:
 - Development of AI models to detect patterns, future scenarios, or options at the micro or macro level.
 - Modeling various scenarios and multiple options for reducing or expanding relevant metrics.
 - Integration and modeling of influencing factors for agriculture such as remote sensing data, in-situ data, land use data, and land change data.
 - Development of the overall system in consultation with the project management and the research team.
 - Promoting young scientists by integrating research results into teaching.
- Preparing project reports, final project reports, and technical publications, including:
 - Documentation and preparation of research results in the form of presentations and project reports.
 - Participation in project meetings domestically and abroad (EU).
 - Coordination of Darmstadt University of Applied Sciences' activities in the project in consultation with project leadership.
 - Preparatory work for the review by funders and stakeholders.
 - Publication of results, including open access publications.
 - Presentation of results at conferences.
 - Integration of research results in independent teaching courses and conducting examinations.

Your Profile:

- Completed academic degree in computer science, data science, information science, or similar (Master's or University Diploma).
- Proficient knowledge of programming languages, especially Python, JavaScript, React, and D3.
- Proficient knowledge in the research of scientific publications using APIs and databases.
- Proficient skills in the areas of AI, Visual Analytics, and neural networks.
- Proficient with the MS Office package.
- Comfortable working on Linux terminals.
- Proficient knowledge in creating, managing, and maintaining databases and data management systems.
- Teamwork and collaborative development.
- Excellent English language skills, both written and spoken.
- Advantageous but not mandatory are:
 - Experience in project acquisition and project management.
 - Knowledge of scientific work.
 - Good German language skills, both written and spoken.
- Independent, structured, and careful way of working.
- Good organizational skills and ability to communicate effectively with different audiences.
- Gender and diversity competence are required.

Remuneration: Based on salary grade 13 of the collective agreement for employees of the state of Hesse (TV-H): Experience-dependent, starting from €40,000 to €57,588 yearly gross salary with the option to have a 100% position. **Pursuing a doctorate** in applied computer science is desirable and **will be supported**.

People with disabilities will be given preference if they are equally qualified.

Darmstadt University of Applied Sciences has an action plan for the advancement of women and equal opportunities. In the interest of truly enforcing equal rights for men and women and the legal mandate to eliminate the underrepresentation of women within the scope of this plan, the university is particularly interested in applications from women. The position can be shared.

Darmstadt University of Applied Sciences has been awarded the "Family-friendly University in the state of Hesse" quality seal by the Hessian Ministry of the Interior and Sports. For the years 2022-2024, it offers its employees free travel in the form of a Hessian state ticket for public transport.

Please contact **Prof. Dr. Kawa Nazemi** (kawa.nazemi@h-da.de) for inquiries about the position and tasks.

Interested? We look forward to receiving your detailed application with the usual documents, stating the reference number mentioned above, by 23.11.2023 at:

Hochschule Darmstadt
Personalabteilung,
Schöfferstr. 3
64295 Darmstadt



or

preferable via email with attachments in PDF format to karriere@h-da.de and kawa.nazemi@h-da.de.

Please submit your application documents (cover letter, CV, work & graduation certificates) in copy only, as they will be destroyed in compliance with data protection regulations after completing the selection process.