



Darmstadt University of Applied Sciences is looking for a

Research Associate (100%)
Reference number: 386/2023 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 an AI-based Visual Analytics Framework as a modular and sustainable decision-making support system 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 solution proposals based on iterative research and proposal of own solutions, especially for interactive visualizations, including visual layouts (e.g., visualizations of future scenarios for knowledge acquisition through data analysis, scenarios, and options).
 - Development of visual analytics approaches.
 - Visual Analytics for policy modeling and e-governance.
 - Integration of “Learning Scenarios” into visual analytics systems.
 - Development of interactive visualizations and modular dashboards.
- Planning, executing, and implementing visual decision-support systems using artificial intelligence, including:
 - Visualization of patterns, future scenarios, or options on a micro or macro level.
 - Visualization of different scenarios and multiple options for reducing or expanding relevant metrics.
 - Visualization of land-use data and land-change data.
 - System development in coordination with project leadership and research team.
 - Intensive collaboration and coordination with European researchers.
 - 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 €53,258 to €76,785 yearly gross salary.

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.