Bauhaus-Universität Weimar

Job posting

The faculty of Civil and Environmental Engineering at the Bauhaus-University Weimar is seeking to fill the position of a

Research Associate / Doctoral Candidate (f/m/d) in the field of Computational Mechanics

as of **01.09.2024** or earlier at the <u>Professorship of Data Science in Engineering</u>. The position is part of the DFG Transregio TRR 277 »Additive Manufacturing in Construction« (https://amc-trr277.de) in the project »C01 Bridging Scales - From Geometric Part Details to Construction Elements«.

The position is to be filled on a fixed-term basis until 31.12.2027. An extension is possible in accordance with the German Academic Fixed-Term Contract Act (WissZeitVG).

Field of Activity:

- Development of numerical models for additive manufacturing
- Prediction of fatigue and fracture of additively manufactured components from imaging data
- Model creation and implementation in C++ e.g. in https://gitlab.com/phmkopp/mlhp or the advanced high-order finite element code AdhoC
- Validation of numerical models using experimental results
- Publication of scientific results in renowned journals and presentations at international conferences (e.g. ECCOMAS)

The achievement of a PhD within the framework of the Transregio is expressly desired and supported in many ways.

Recruitment requirements:

- Master's university degree in mechanics, computer science, civil engineering, mechanical engineering or comparable courses of study with an average grade < 2.5
- Very good programming skills, preferably in C++ or very high interest to acquire them
- Interest in interdisciplinary issues (the above-mentioned fracture models can be used in a different form in biomechanics, for example)

The salary is based on the provisions of the Collective Agreement for the Public Service of the Federal States (TV-L) in accordance with personal requirements for pay group <u>13 TV-L</u>.

Diversity and supporting equal opportunities are important at the Bauhaus-Universität Weimar. We are committed to providing a family-friendly and non-discriminatory work environment and operate under a personnel policy founded on equality and diversity. We particularly welcome applications from individuals with diverse backgrounds, experiences and professional histories. One of the strategic goals of the Bauhaus-Universität Weimar is to increase the proportion of women in scientific/artistic/academic positions. The Bauhaus-Universität Weimar expressly invites women scientists, designers and artists to apply. In addition, special funding programs for women are available through the Transregio.

Equally qualified people with disabilities will be given preferential consideration.

Please send your application by E-Mail as a single pdf including a short motivation letter quoting the **reference number B/DMP-09/24**, your CV, and the Certificate of your Master's degree including the transcript of records, **by July 8th**, **2024** to

Bauhaus-Universität Weimar Professur Data Engineering im Bauwesen Fakultät Bau- und Umweltingenieurwissenschaften Prof. Dr.-Ing. habil. Stefan Kollmannsberger Coudraystraße 13 b, Raum 003 99423 Weimar

E-Mail: stefan.kollmannsberger[at]uni-weimar.de

Information on Data Protection

Please note that the confidentiality of unencrypted e-mails cannot be guaranteed. Because the Bauhaus-Universität Weimar is unable to guarantee encrypted receipt of your e-mail, you may also submit your application via post to the above address.

When an application is submitted electronically, the applicant consents to the scanning of the submitted files for harmful codes, viruses, and spam, to the temporary storage of the required data, and to the conduct of future (unencrypted) e-mail correspondence.

Additional information on data protection pursuant to Art. 13 of the EU Basic Data Protection Regulation (EUDSGVO) can be found on our website:

https://www.uni-weimar.de/de/universitaet/aktuell/stellenausschreibungen/datenschutz/

Please note that only the German-language version of this job vacancy notice is legally bind.