
The Department of Mechanical Engineering at TU Darmstadt, Group for Cyber-physical Simulation headed by Prof. Dr. rer. nat. Oliver Weeger, is offering a position as

Research Assistant in Computational Mechanics

starting on April 1, 2019, or later. The position is initially limited to 3 years and can be extended up to another 2 years.

Tasks:

- Research in one or more of the following topic areas:
 - Development and application of numerical methods for structural and continuum mechanics (in particular, finite element methods and isogeometric analysis)
 - Modelling and simulation of multi-physics or multi-scale effects
 - Design, structural and topology optimization methods
 - Data-driven methods connecting computational mechanics and machine learning or artificial intelligence
 - Applications in additive manufacturing, e.g., multi-material 3D printing of functional materials and structures, 4D printing, meta-materials and lattice structures
- Further tasks include mentoring of undergraduate students through tutorials, recitations and seminars, as well as assistance in research and teaching duties.

Qualifications:

- Completed degree (masters or diploma) in mechanical or computational engineering, applied mechanics, mathematics or computer science, or related fields
- Very good fundamental training in mechanics and numerical methods
- Basic knowledge or first research experience in computational mechanics, structural or continuum mechanics is an advantage
- Good programming skills, preferably in C++, MATLAB and Python
- Interest in scientific research and interdisciplinary work, structured working skills
- Didactic skills (communication, motivation, creativity)
- Very good command of English language

Opportunity for further qualification (doctoral dissertation) is given. The fulfillment of the duties likewise enables the scientific qualifications of the candidate.

The Technische Universität 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 salaries are according to the collective agreements on salary scales, which apply to the Technische Universität Darmstadt (TV-TU Darmstadt).

We are looking forward to receiving your application, which should include a meaningful cover letter, in which you highlight your motivation, qualifications and research interests, as well as your CV, certificates and transcripts of grades. Please send your application documents electronically in a single PDF file and referencing the code no. to Prof Dr. rer. nat. Oliver Weeger, weeger@cps.tu-darmstadt.de (from March 1, 2019: TU Darmstadt, FB 16 - FG FNB - AG CPS, Dolivostraße 15, 64293 Darmstadt)

Code No. 8

Application deadline: January 31, 2019
