technische universität
dortmund

With 6.500 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future: the cooperation between engineering and natural science as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology, which not only the roughly 33.440 students benefit from.

Postdoctoral researcher in Uncertainty Quantification

At the faculty of Mechanical Engineering, associated with the Chair for Reliability Engineering of Professor Matthias Faes of the TU Dortmund University, one scientific employee position (m/f/d) at the post-doc level is available starting at the earliest possible date for a period of three years. According to public tariff regulations, the salary is based on tariff group E13 TV-L. Employment in or reduction to part-time is possible in principle.

YOUR TASKS: The research project is situated in the quickly advancing field of "Imprecise Probabilities" and it is aimed at developing mathematical tools to model spatio-temporal uncertainties in the form of imprecise stochastic processes. Your tasks will include performing basic scientific research in the domain of data-efficient uncertainty modelling with applications in mechanical engineering, as well as regular presentation of research results at symposia and conferences. This research is to be performed in the framework of a funded DFG project.

WE OFFER: The possibility to perform cutting-edge research in a young scientific domain at the cross-roads of numerical simulation, applied mathematics, engineering and computational mechanics, a solid supporting international network; strong scientific and personal development and

OUR EXPECTED QUALIFICATIONS: We are looking for an enthusiastic, self-motivated scientific employee (m/f/d) with strong interests in simulation and advanced Uncertainty Quantification (UQ) methods, as well as data-driven techniques. A PhD degree with a profound background in uncertainty quantification related to mechanical/ civil/electrical engineering, computer science or applied mathematics including numerical simulation techniques is required. A strong track record of publications in peer-reviewed scientific journals, a proven history of international experience and scientific awards are considered as a bonus.

IDEAL ASSETS ARE:

- a PhD degree in a relevant domain (engineering, computer science, statistics, physics or applied mathematics)
- a solid engineering and/or mathematical background
- self-driven and independent research capabilities
- a natural team-player mindset
- ideally, experience in the field of uncertainty quantification
- demonstrated excellent skills in written and oral English
- a healthy dose of enthusiasm

We promote diversity and equal opportunities. Convince us with your personality and expertise. Applications from women will be given preferential treatment in accordance with the statutory regulations. It is pointed out that the application of suitable severely disabled persons is desired.

Please send applications with a) letter of motivation, b) curriculum vitae (including list of publications, if applicable), c) copies of degree certificates, d) writing sample (master's thesis or seminar paper) (preferably as a PDF document), quoting the reference number w101-23, by 2023/12/01 to:

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