The Chair of Engineering Design (KTmfk) at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) in Germany invites applications for a PhD position in Biomedical Engineering:

“Neuromechanical Musculoskeletal Modeling and Simulation”
C03-KTmfk

Background:
The planned research is embedded as one of 19 exciting scientific subprojects in the Collaborative Research Centre (CRC) 1483 EmpkinS. CRCs are one of the most renowned research measures in Germany. The aim of this subproject is to research methods for the modeling of (patho-)physiological postural function of the human body. The doctoral candidate will investigate methods for neuromechanical control of human gait based on healthy and pathophysiological motion data (e.g., in the context of Parkinson’s disease). This interdisciplinary project will be carried out in close collaboration with clinical and data science experts.

Requirements:
We are looking for a motivated and creative doctoral candidate, capable of working in an interdisciplinary team, with an above-average master or comparable university qualification in Biomedical Engineering or related fields (e.g., Computer Science, Electrical Engineering, Mechanical Engineering, etc.). Knowledge in one or several of the areas biomechanical modeling and simulation, control systems engineering or neuromechanics is desired. The ideal candidate shows strong enthusiasm towards research and has excellent teamwork abilities.

Work Environment:
Research in the interdisciplinary biomechanics team of the KTmfk focuses on musculoskeletal modeling and simulation linked to biomedical engineering and virtual product engineering. Detailed information is available on our website, via our publications and upon request. The KTmfk is part of the Faculty of Engineering which awards the academic degree Doctor of Engineering (Dr.-Ing.).

Position and Application:
The project start date is July 1 or later. This is a temporary position that is at least available for 3 years. Remuneration is based on the collective agreement for civil servants in Germany (TV-L E13, fulltime position). The appointee may pursue doctoral studies in the Faculty of Engineering. Applications from severely disabled persons, in the case of equal suitability, will be treated preferentially. Qualified female candidates are especially encouraged to apply as there is a policy in place at the University to increase the proportion of female staff.

Please submit your application (motivation letter, tabular CV, certificates) as one document indicating the project code C03-KTmfk by e-mail by June 14, 2021 to empkins-jobs@fau.de.

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