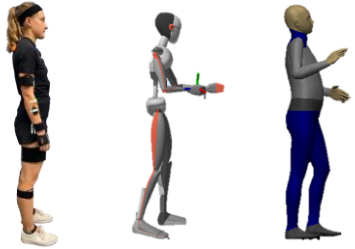
Lehrstuhl für Ergonomie
TUM School of Engineering and Design
Technische Universität München

Bachelor Thesis/ Master Thesis

Development of a method for joint angle transfer between motion capture system and biomechanical model

When working with hand-held electric tools, users are sometimes exposed to high stresses due to non-ergonomic postures, vibrations and external forces. In order to develop a stress prediction system, a posture prediction model is to be created that draws on data sets collected using measurement technology. A transfer interface between a motion capture system and a biomechanical model is to be developed and validated to facilitate the creation of the posture model.



Tasks:

- Development of the interface
- Systematic recording of posture data for validation
- Validation of the transmission interfaces

Requirements:

- Scientific, structured and intuitive working strategies
- Knowledge of biomechanics and human modeling is an advantage
- Experience with Matlab and RAMSIS
- Good knowledge of Germen or English

Begin of the thesis: Immediately

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