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

Semesterarbeit/ Masterarbeit

AI powered Posture Prediction for drilling tasks

How does human posture change when drill height, tool design or applied force vary? Find out – using real biomechanical data from the CoSiMMI research project!
In this thesis you will develop an AI model that predicts realistic working posture form joint angles, EMG, grip forces and force-plate data. Your work will help design more ergonomic tools and explore how AI van truly understand human movement.

Interested in machine learning, biomechanics and real-world data?
Join us!

Requirements

- Interest in biomechanics, ergonomics, or AI
- Basic skills in Python or MATLAB
- First experience with machine learning is an advantage
- Enjoyment of data analysid and modeling

The project can also be completed as a team – feel free to encourage interested friends or fellow students to join and apply together.

For more insights into the project please contact me.

Start date: as soon as possible

Kontaktperson:

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