



The Institute of Applied Dynamics (LTD) at Friedrich-Alexander Universität Erlangen-Nürnberg searches, starting at 01 March 2023, for up to six months

Student assistant (Hiwi) for supporting tasks in research in the field of experimental biomechanics

Processing of motion capturing measurements of hand movement

The LTD works on computer based simulations and optimal control of dynamic systems with applications from robotics and biomechanics, for instance, the optimization of gait with two legs or grasping of objects. The latter is relevant within the collaborative research center 1483 "EmpkinS". Measurements were collected within this project and have to be processed.

Support is needed for the processing of the measurements. This includes labeling markers in the measurement and classifying the measurements. Further, application of evaluation methods on the data, creation of plots, diagrams and literature research will also be part of the work packages. The tasks will allow a quite extensive insight in the everyday work in research in the field of biomechanics. The workload is between 6 and 10 hours a week. The working time can be distributed in a flexible way. A long term employment is desired. It is also generally possible to continue with a student thesis in this project.

Necessary qualifications

- technical studies (mechanical or medical engineering, or similar)
- independent & reliable working
- interest in practical research tasks
- fluent in English or German



- first experience in programming (Matlab or similar)
- basic knowledge in biomechanics
- experience with optoelectronic measurement systems (Qualisys, Vicon, or similar)

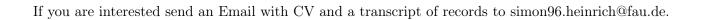




Figure 1: Passive markers for tracking hand motion.