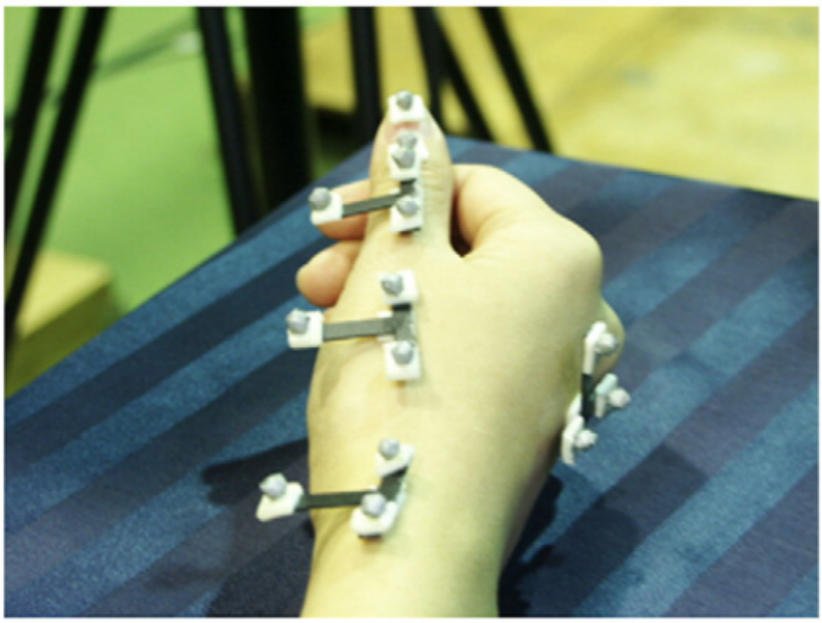
The Chair for Applied Dynamics (LTD) of Friedrich-Alexander-Universität Erlangen-Nürnberg is offering at the earliest possible time a

Project-/Master thesis

with the topic

Total range of motion of the human thumb

In Biomechanics, range of motion studies are normally performed to evaluate the maximum limits of the joints or the limits in the activities of daily life. The most common method to evaluate joint range of motion is through motion capture, using markers and camera.
The thesis involves to determine the range of motion of the human thumb using motion capture. After a thorough literature survey, the measurements will be performed on a number of subjects (male and female) at the state-of-the-art Motion Analysis Lab at the Chair for Applied Dynamics. The measurements would be then post-processed to determine the total range of motion. Further research on the thumb joints can also be done, to expand the scope, if necessary.



Qualification

- Technical/Pure Sciences studies (Engineering, Mathematics, Physics, ...)
- Programming experience in Matlab or C/C++
- Courses in Mechanics/Dynamics (e.g. Multi-Body dynamics and Biomechanics)

If interested, please mail at *uday.phutane@fau.de*.