Bachelor-Arbeit
„Evaluating reconstruction capabilities of motion capture systems for humans”

Background:

Motion Capturing has been used in movies to create realistic character animations for several years. With increased sophistication, motion capture also gains more relevance in the field of biomechanics. Therefore, the Heidelberg Center for Motion Research is offering a Bachelor Project to benchmark the motion capture systems available in its Motion Capture Lab. The two available systems are either camera- and marker-based with an accuracy in the range of millimeters or based on wearable acceleration sensors. While the marker-based system is more accurate, it is confined to a lab environment whereas the wearable sensors are not.

The Project:

The Bachelor Project will evaluate both systems for different types of motion, such as walking, jumping, balancing on a slackline or weightlifting. The student will record these motions via measurements in the Motion Capture Lab and reconstruct them to determine the suitability of the capture systems for each individual task. Analysis will be done either in C++ or Python.


Bei Rückfragen oder zur Bewerbung wenden Sie sich an:
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