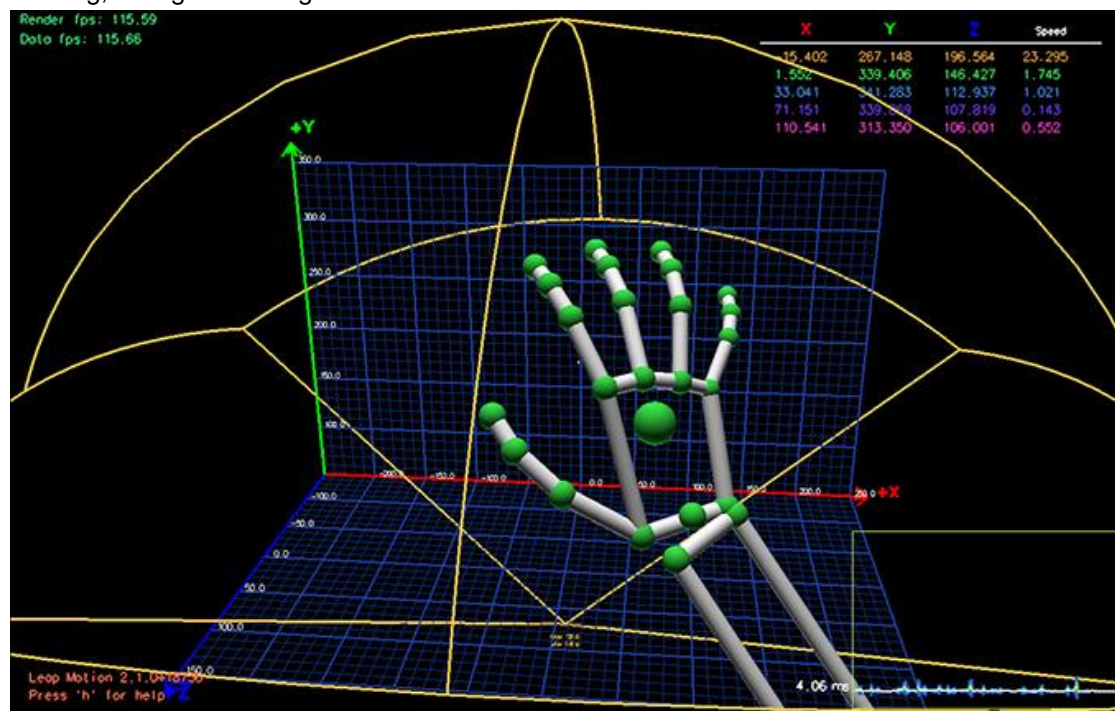|	
Course	Seminar in Pervasive Computing: Activity & Gesture Detection based on Hand & Finger Motion, 2018S
Content	The goal of this year's seminar in Pervasive Computing is the employment and exploration of the Leap Motion Controller as input device for Activity & Gesture Detection algorithms. This sensor allows to track hand and finger motion and can be mounted on a headset in order to make it wearable. APIs are provided for major languages like Java or Python and enable high level access to hand and finger models. The idea is to investigate (using e.g. data mining and machine learning techniques or logic and reasoning) whether the data can be helpful for detection scenarios described in the following: In an industrial context, is it possible to recognize a worker's current task, based on the hand and finger motion? Or, in a leisure scenario, can hand or finger motion be used for detecting certain activity classes like reading, biking or walking?

Deliverables	The seminar participants (in groups or alone, depending on the number of participants) will have to accomplish the following deliverables:

- Engage different papers on the topic (Related Work-Study)
- Intermediary Presentation (Goals, Proceedings, Discussion)
- Hardware/Design Prototype
- Design of a small user experiment (Data collection; what to inspect? why? expected outcome?)
- Realize analysis and interpretation (Choose methods)
- Interpretation of results
- Final Presentation (Results; Problems; Achieved goals; Discussion)
- Written Summary (Paper)