

## Institute for High Integrity Mechatronic Systems (ZMS)

# Implementation of an adaptive active knee orthosis

The need for innovative medical devices for lower limb rehabilitation is growing. The ZMS is working on the research for exoskeletons and active orthoses. To make these systems easier to customize we have a look at Soft Robotic solutions to create highly adaptive orthoses shells.

#### We offer:

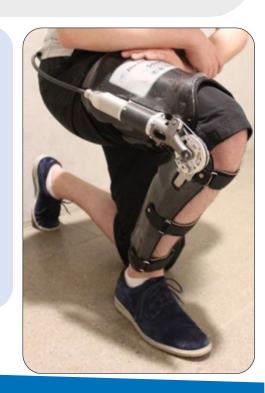
- Theses (Bachelor or Master) and research masters (MSD) with subject-specific supervision
- Flexible working hours and independent work
- Practical experience in the field of applied Research
- Young and motivated team

### Your profile:

- Degree in mechatronics, electrical engineering, computer science or similar degree programs / relevant work experience
- Knowledge in CAD, Matlab
- Passionate to learn, highly motivated, responsible, independent

### Your tasks:

- Research and Development of shell principles for adaptive shells of an active knee orthosis
- Implementation of a proof of concepts for an adaptive active knee orthosis
- Verification of the Implementation





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