



Discovery Program: Low-cost safety robot for the Myosuit

Description:

When muscle weakness of the legs is reducing walking capabilities, affected people search for mobility aids that can help them to regain their independence in a fast and safe way. The Myosuit is such a tool. Although the Myosuit provides significant support during ambulation, it cannot prevent falls, and some patients require an extra layer of safety to learn to use the Myosuit at its full potential. The safety robot will measure certain parameters of a Myosuit user, can adjust to the weight-bearing needs and is able to catch the users if they are falling. The aim of this project is to develop a first prototype of such a safety robot.

- 10% literature research
- 20% Requirement and specification definition
- 50% Prototyping
- 20% Testing the designs on users

Requirements:

- Enrolled in computer science, mechanical or electrical engineering, robotics, mechatronics or a related Master's program
- Knowledge of CAD software
- Proven experience in prototyping other complex projects
- Knowledge of C and Python programming languages

Would be great if the candidate has:

- Previous experience in biomechanics, exoskeletons
- Feels comfortable working in very open-ended problems

Other information:

Duration: 6 months

Starting date: February

Affiliated ETHZ Lab: Sensory-Motor Systems lab

Apply:

Send CV, latest transcripts and a motivation letter to discovery@myoswiss.com. State the name of the position in the subject of the email.