Master thesis project - Development of soft robotics solution

Bioservo are working in a number of projects to develop new products using our Soft Extra Muscle (SEM) technology. We are currently looking for two thesis students for one of these projects that aims to develop a soft robotics device that gives extra strength to the user’s arm. We think that the two candidates complement each other and have knowledge of product development, mechanical design, ergonomics, biomechanics or similar. You should be self-driven and able to work on your own while still adapting to and collaborating with the rest of the project team, which includes industrial design, electronics & mechanical engineers, human movement scientists and more.

The project will be a mix of research, design, prototype building and testing, probably in an iterative way. The thesis project will be a part of a larger project and Bioservo hope that the outcome of the thesis project will be useful for building prototypes of the final product. The details of the project will be defined based on the candidates’ experience but main challenges that will be addressed include how to design the support structure for the force transfer, how to anchor the forces in the different parts of the upper body and how to make the product ergonomic and easy to take on and off.

About Bioservo

Bioservo Technologies has been developing unique muscle strengthening equipment based on the patented SEM™ (Soft Extra Muscles) technology since 2006. Our first product, SEM™ Glove, was developed at KTH Royal Institute of Technology in collaboration with neurological experts from Karolinska Hospital. R&D and production is done in Kista.

Our mission is to use modern robot technology to create innovative products that strengthen the body’s functions and power. The unique and patented SEM™ technology has a wide scope of use and can be applied in different areas of the body where empowered muscle strength is needed. Our products fall within the rapidly growing areas of wearable technology and exoskeleton.

Visit www.bioservo.com for more information.

Application

Please send your application to stefan.eriksson@bioservo.com. The application should contain CV, cover letter and grade transcripts. If you have already formed a good duo please apply together. If not, apply on your own and we will match you up with a suitable partner. We will interview candidates continuously so please send your application as soon as possible.