

Biomechatronics Group, MIT Media Lab

Graduate Research Assistant, Master's Student 2019-2021
Senior Research Support Associate (SRSA) 2017-2019

“The Biomechatronics group seeks to advance technologies that promise to accelerate the merging of body and machine, including device architectures that resemble the body's own musculoskeletal design, actuator technologies that behave like muscle, and control methodologies that exploit principles of biological movement.”

Socket Team

Challenge: Prosthetic sockets are currently manufactured using manual labor and are bespoke to the wearer. This manual process is expensive and often inaccurate, leading to sockets that do not always fit properly or might be poorly constructed.

Goal: Develop a data-driven, computational design framework to design affordable, subject specific prosthetic sockets and replace the traditional manual process.

My Contributions

As Graduate Student: Prototyped a Desktop Automated Fiber Placement machine to manufacture carbon composite prosthetic sockets.

As SRSA: Designed and implemented a patient Scanner and Indenter to measure the time-varying 3D shape and mechanical properties of a residual limb.

