Project SHELI

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One of my best friends struggles with Arthrogryposis Multiplex Congenital which fuses your bones and stiffens your muscles. In her case disables her upper body functions and disables her to walk. Thankfully she had not only adapted to writing with her mouth but also creates art (yes, even sculptures) despite her condition. Unfortunately, My friend's need for a human assistant creates a lack of independence. My job is to change that by constructing her a robotic arm she can use to assist her. This kind of prosthetic arm is attached to the wheelchair rather than the user which is adapted for people with disabled limbs rather than missing limbs. The goal of this project is for her to take care of herself without any human assistance. Thus helping her become more independent throughout her life. The first prototype will be focused on function. The second prototype will focus both on function and aesthetics. During this stage, Rachel will design how she wants her arm to look, as long as it stays in the parameters necessary for its function. I also decided to create city-wide workshops to teach other high school students how to create prostheses for volunteer amputees. Students will be provided the tools and resources needed to create their prosthesis and be evaluated as safe by a panel of professional judges. If they pass this inspection, they will be allowed to gift the prosthesis to the volunteer for everyday use.

Awards Won: