

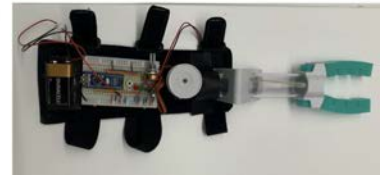
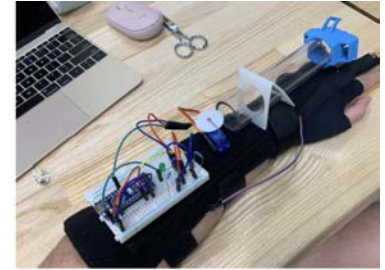
# Wearable Soft Robotic Gripper Toolkit

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The wearable soft robotic gripper toolkit is the newest iteration of the previous soft robotic gripper toolkit. The goal of the wearable soft robotic gripper toolkit is to develop an accessible resource to support the effort to educate and expose users to the field of soft and wearable robotics. We converted the previous kit into a wearable device which could be attached to the user's forearm and hand to better highlight the potential applications of soft robotics in assistive wearable devices. Parts from the previous kit were modified and new parts were designed to ensure the wearable device was functional and comfortable. These modifications bolster the educational potential of the device by creating more avenues for exploration and encouragement in creative thinking in the field of assistive and rehabilitative devices.



On the left, the previous iteration of the soft robotic gripper toolkit is shown. To the right is the wearable soft robotic gripper prototype.

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Abigail Rose Lockhart-Calpito is an undergraduate at Harvard College studying mechanical engineering. During her time in the Walsh lab, Abigail discovered her interest in soft robotics and their applications. In terms of the wearable soft robotic gripper toolkit, she enjoyed the design process and challenge of developing a product that would have a direct educational impact on it's users. She is also interested in learning more about how soft robotic solutions can be applied to day to day life. Beyond her specific project, Abigail is now considering pursuing a graduate degree after graduation as a result of her REU experience.



Photo of researcher Abigail R. Lockhart-Calpito quickly sketching the soft robotic gripper tendon actuator.