

Hand Mirror

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Problem Statement- The goal of the project was to create a robotic hand that would be able to mimic the actions of the user via a glove the user wears . Applications of this could pertain in the medical field with surgeries

Approach- The approach was to initially communicate via Bluetooth to transfer user input to the robotic hand. However, due to multiple issues with the Bluetooth modules, the decision was made to hardwire it and program the user actions into the code



Technical Details- The glove that will be worn by the user will have Flex Sensors attached to each finger. The Arduino Uno will read the input for each sensor. Then it will relay it to a corresponding Servo Motor that will engage a linkage system that will make the 3D printed hand mirror the user's hand

Conclusion- Based on the research conducted and the design that was implemented, there is a future for a technology that revolves around using flex sensors and servos to mirror the hand gestures/movements