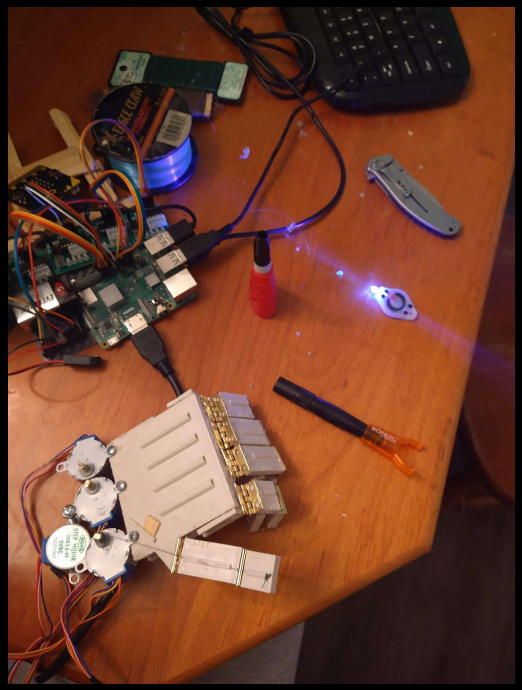
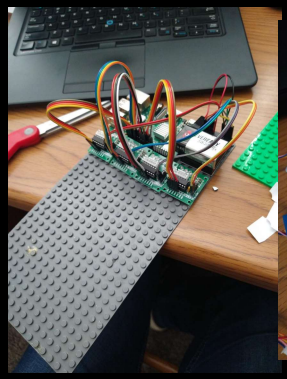
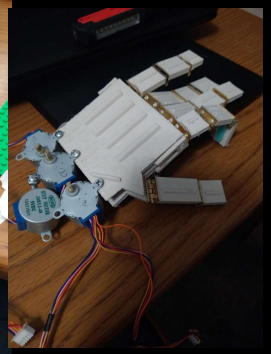
Building a Cheap Prosthetic Hand with Mini Computers, Driver Boards, and Motors

Pictures







Engineering Goal:

Build a Cheap Prosthetic Hand using Mini Computers

Materials And Methods:

- Popsicle Sticks
- Printed Hand
- Raspberry Pi 3B+
- Micro:Bit
- 5 Stepper Motors
- String
- Drill
- Knife
- Glue

First you are going to want to gather your materials on the side. Then you are going to want to write your code and then attach the entire hand that you have either created, or printed. Then after that you hook up the motors to the Raspberry Pi and you hook the sensor to the hand. Afterwards you make sure everything is put together and test the project.

Code Results

The Computer gave back many computer codes, since this was written In python, it was only able to run one line of code at a time, much like The famous code language known as JavaScript. This made it so that it Returned with Step Returns of “Step 1 - 525” three times because There was three motors running.

Conclusion:

At the end of the project, the project could be both considered a success and a failure. There are many things that went well and many things that went wrong and many things could be improved and I could make it more easily accessible and cheaper. I would be able to finish this project again next year or do it again on my own time. This would allow me to make many improvements, both with code and with sensors allowing me to possibly have this be a real usable project in the future.

By Jeron Osguthorpe