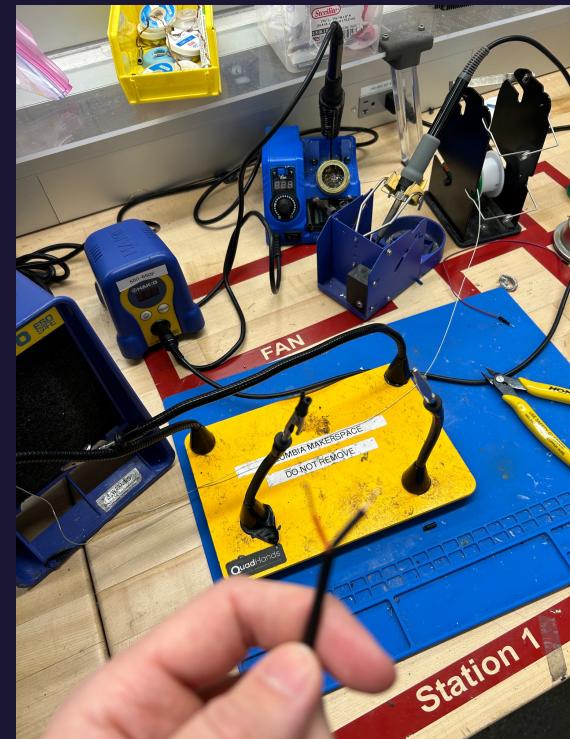


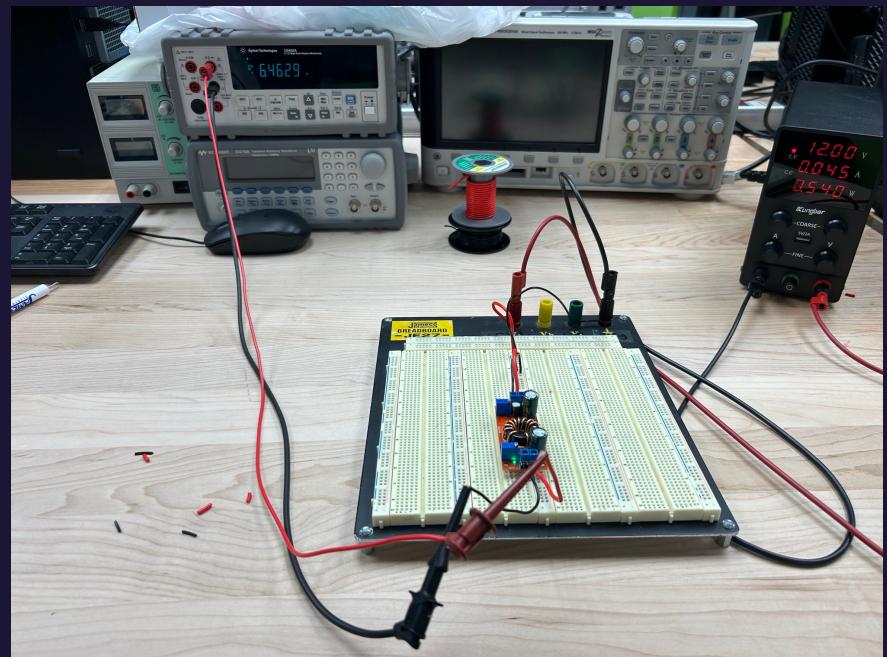
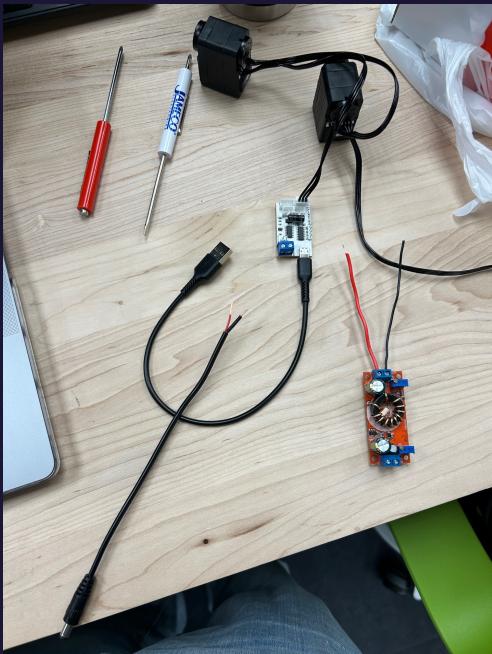


Robotics Studio MECE 4611
Spring 2024
Assignment III
Nicolino Primavera (ncp2136)
Submission: 3/1/24 at 23:45
Grace hours: 81:05 + 48:15 hours
Bob the Minion
General Robot Rendering

Soldering

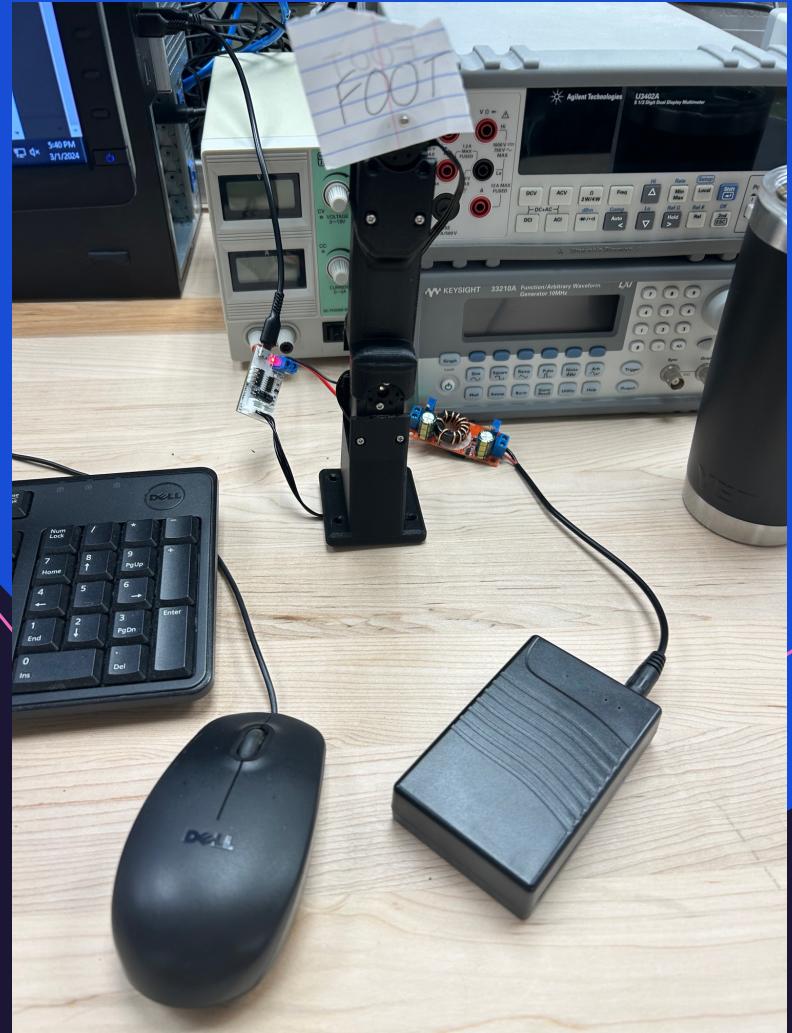


Circuit



Testing the voltage (Mechatronics skills)

Circuit hooked up to leg



3D Printed Parts



Hip



Knee

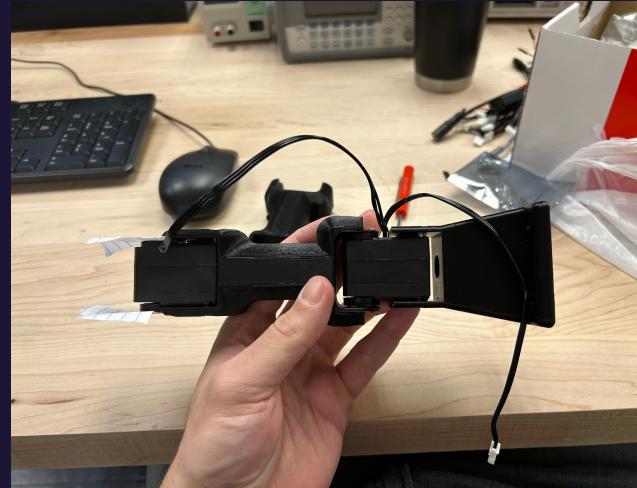


Modular foot

- Could not have my foot printed in time, but the show must go on!



Leg



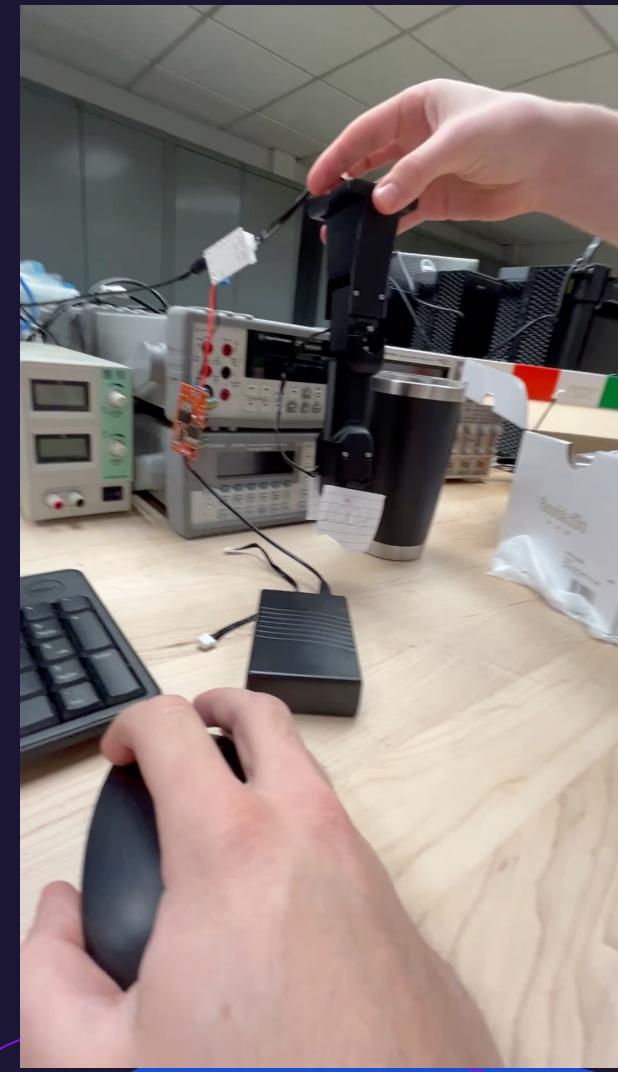
Errors

- Collision errors
- I already adjusted the parts in CAD, but I did not have time to reprint → show must go on
- Used a box cutter to saw off the problem

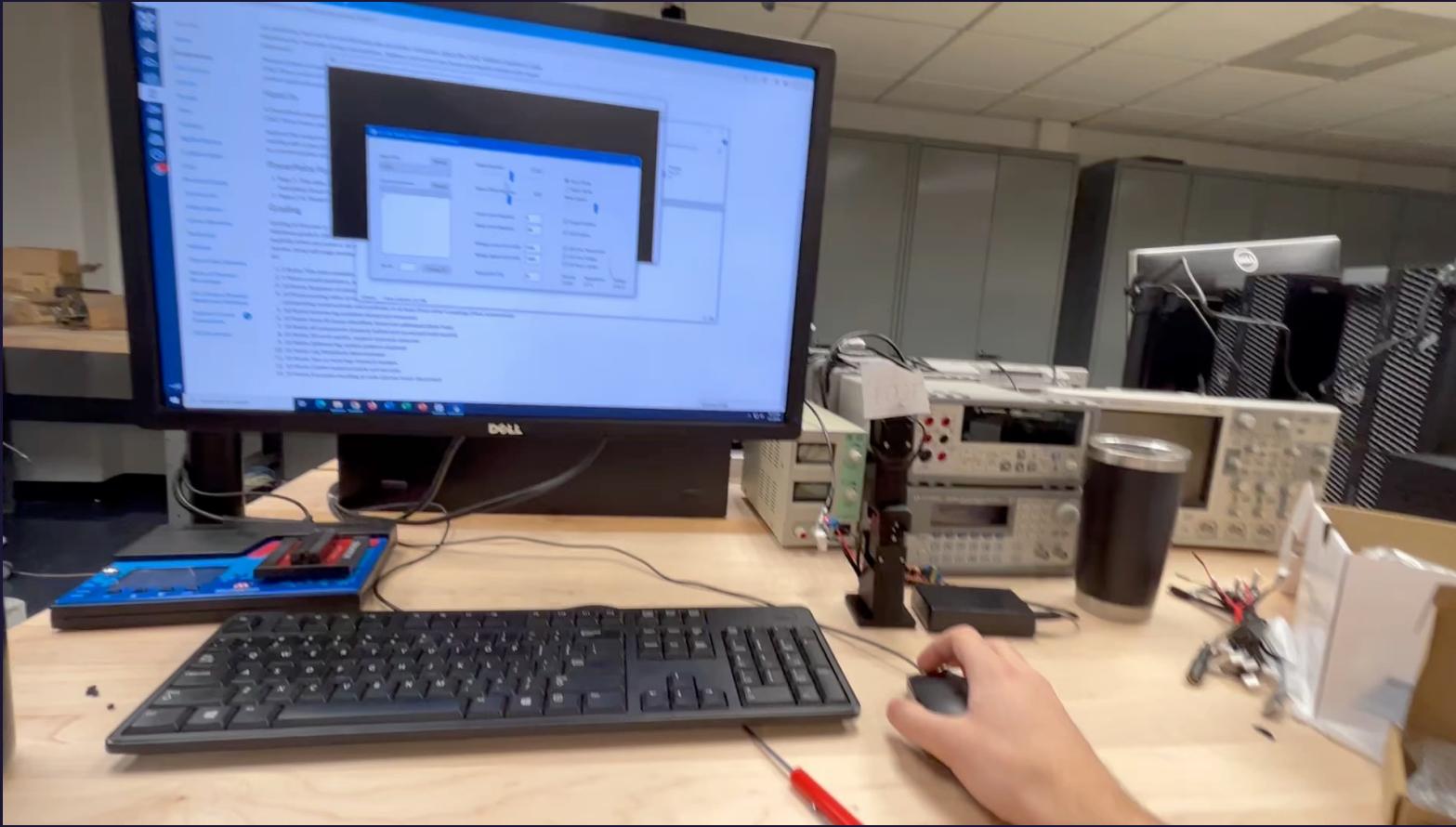


Leg Simulation

- <https://drive.google.com/drive/folders/1-JF-Yjmr2Q2A51x1-4xqq9oj23MfdETO?usp=sharing>
 - Google drive link to my videos

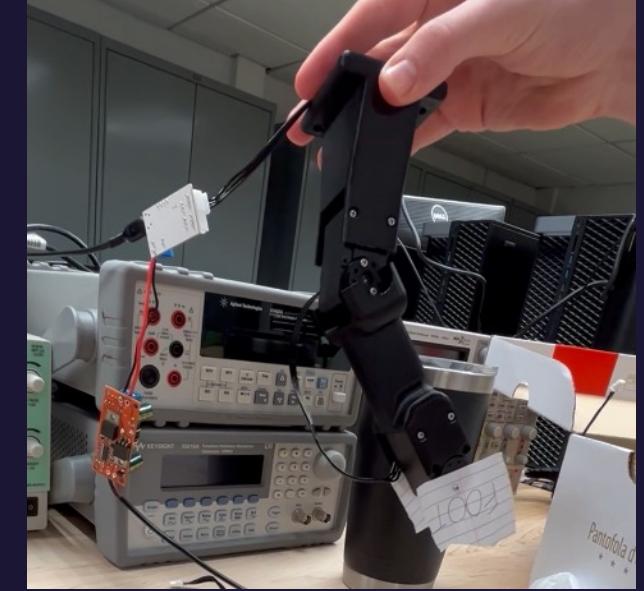


Leg Simulation



- <https://drive.google.com/drive/folders/1-JF-Yjmr2Q2A51x1-4xgg9oj23MfdETO?usp=sharing>
 - Google drive link to my videos

Sequence of photos showing leg in motion



Rubric Checklist

5 Points - Title slide complete (Slide 37)

5 Points - overall aesthetics, layout and formatting of the slides (All Slides)

10 Points - Sequence of photos showing leg in motion (Slide 49)

10 Points - posting video of moving leg on the discussion board at least 24h in advance of deadline, and commenting constructively and positively on at least three other's postings (show screenshots) (slides 51-52)

10 Points - extreme leg positions tested and measured (Slide 48)

10 Points - form/fit issues identified, listed and addressed (show how) (Slide 46)

10 Points - all components properly bolted and connected (with inserts) (Slide 45)

10 Points - 3D-print quality, support structure removed (Slides 41-43)

10 Points - Different leg motion patterns explored (Slides 47-48)

10 Points - Leg Modularity demonstrated (Slides 47-48)

10 Points - Two or more legs tested in tandem

10 Points - Cables routed properly and securely (Slide 45)

10 Points - Exception handling in code catches motor disconnect

Comment (constructively) on at least three other's postings

Working Leg- group 3 #101

S Shivangi Shah 5 hours ago in Working robot

STAR WATCH 22 VIEWS

Check out the leg motion
1. Single motor (servo.py)
https://drive.google.com/drive/folders/1-H922BAw_L162-rMD-fNDUiDonaHdL9

2. Both motors together (hello_world.py)
https://drive.google.com/drive/folders/1-KWLxn0Qes_EEuotD8fbW4TaNKVssFzy

(Access only to lormall)

Comment ...

Sort by Newest ▾

Add comment

N Nico Primavera now Nice work !

Reply Edit Delete ...

Working Leg Video - Xinyu Gao #99

X Xinyu Gao 23 hours ago in Working robot

STAR WATCH 32 VIEWS

Here are the videos of my working leg. Feel free to share any comments and suggestions!

For Wave Motion: https://drive.google.com/file/d/1v5nBQgR5cB1v6VV0mSNxR-VjPRrmvbDid/view?usp=drive_link

For Walk Motion: https://drive.google.com/file/d/1YazF3C4krtGtKyKvvKoDWKyK-l93Cq4/view?usp=drive_link

Comment ...

Sort by Newest ▾

Add comment

N Nico Primavera now Great job !

Reply Edit Delete ...

S Shivangi Shah Sh Great work! Looks really good :)

Reply ...

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0 Servo Test Problem Working rest Hanan Zhang 3h

Working rest Hanan Zhang 3h

Working rest Shivangi Shah 3h

Orders received General Dennis Novakovic 12h

Working rest Xinyu Gao 23h

Caution about Soldering Motor Wires General James Riley 1d

Working Leg Working rest Rohit Dholakia 2d

Shaft replacement [Amazon] Working rest Rohit Dholakia 3d

Jellyfish Robot CAD design Rohit Dholakia 3d

Lab Lockers General Dennis Novakovic 3d

19 others online

Add comment

A Anish Rajneesh K Thamke 2 days ago Great motion! Would have been great to have seen your reaction in the video as well :)

Comment ...

Add comment

N Nico Primavera Now Nice work !

Comment Edit Delete ...

Add comment

You have already written an answer to this question. Write another?

Write another answer

ED Discussion Post

ed MECE 4611 S1 – Ed Discussion

New Thread

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- Working Leg- group 3 Working robot Shivangi Shah 5h 1
- Orders received General Dominik Nasilowski STAFF 12h
- Working Leg Video - Xinyu Gao Working robot Xinyu Gao 23h 2

Working Leg #103

Nico Primavera 4 minutes ago in Working robot

Hi all,

Attached is a google drive link to my leg simulation.

<https://drive.google.com/drive/folders/1-JF-Yjmr2Q2A51x1-4xgg9oj23MfdETO?usp=sharing>

Comment Edit Delete ...

Did you find a solution to your question?

Answer your question