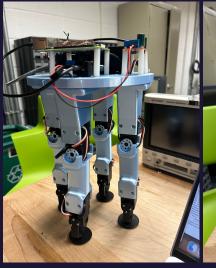


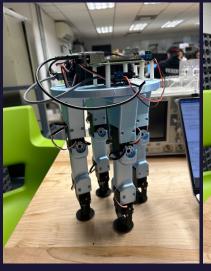
Robotics Studio MECE 4611
Spring 2024
Assignment VI
Nicolino Primavera (ncp2136)
Submission:
Grace hours: 151:20 + 5:15 hours
Bob the Minion
General Robot Rendering

Completely Assembled Robot











Printed Minion Parts

 Still need to print the top of the minion head mill do that after I have completed walking and am ready for the final assembly



Robot Moving – Test

- https://drive.google.com/drive/folders/1yZS1oX3Cz2ZRKnKUx
 https://drive.google.com/drive/folders/1yZS1oX3Cz2ZRKnKUx
 https://drive.google.com/drive/folders/1yZS1oX3Cz2ZRKnKUx
 https://drive.google.com/drive/folders/1yZS1oX3Cz2ZRKnKUx
- Testing robot movements and stability

Multiple Walking Patterns Tested

- https://drive.google.com/drive/folders/1Uxje2eZruJtovWXzQS
 4zDa0HuHiG48d7?usp=share_link
- Testing multiple walking patters and stability

Rubric Checklist

- 5 Points Title slide complete (Slide 70)
- 5 Points overall aesthetics, layout and formatting of the slides (All slides)
- 10 Points glamour photo of working robot (Slide 71)
- 10 Points robot moving (frames shown + link to video) (Slide 73-74)
- 10 Points Plotted motor angles as function of time
- 10 Points Robot speed measured (cm per cycle, cm per sec, robot sizes per cycle)
- 10 Points Robot stability verified in various locomotion configurations (Slide 73-74)
- 10 Points all components properly bolted and connected (Slide 71)
- 10 Points 3D-print quality, support structure removed (Slide 71)
- 10 Points Robot sanded and painted (Slide 71)
- 10 Points Multiple walking patterns tested (Slide 73-74)
- 10 Points Cables routed properly and securely (Slide 71)
- 10 Points motors controlled directly from Raspberry Pi
- 10 Points motors powered using battery (Slide 73 74)
- 10 Points post some video of the walking robot on Discussion Board (show screenshot, provide link) (Slide 76)
- 10 Points post video of your robot on your online portfolio (include screenshot and link)
- 10 Points Robot ongoing health test routine implemented (Slide 73 74)
- 10 Points Robot shutdown routine implemented (Slide 73 74)

ED Discussion Post

