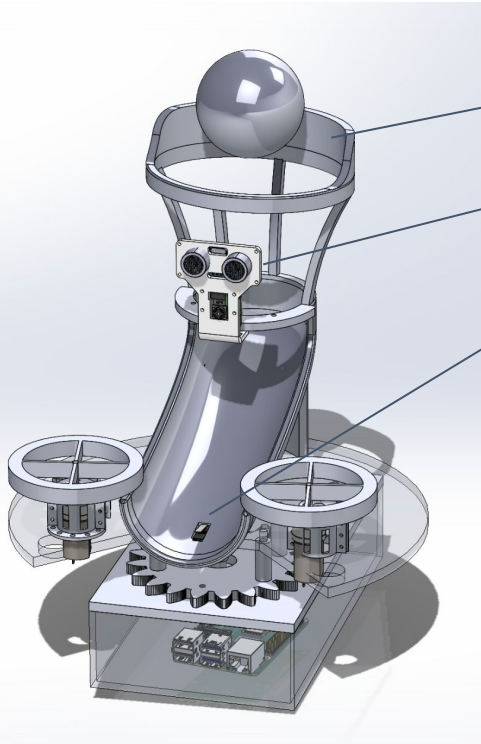
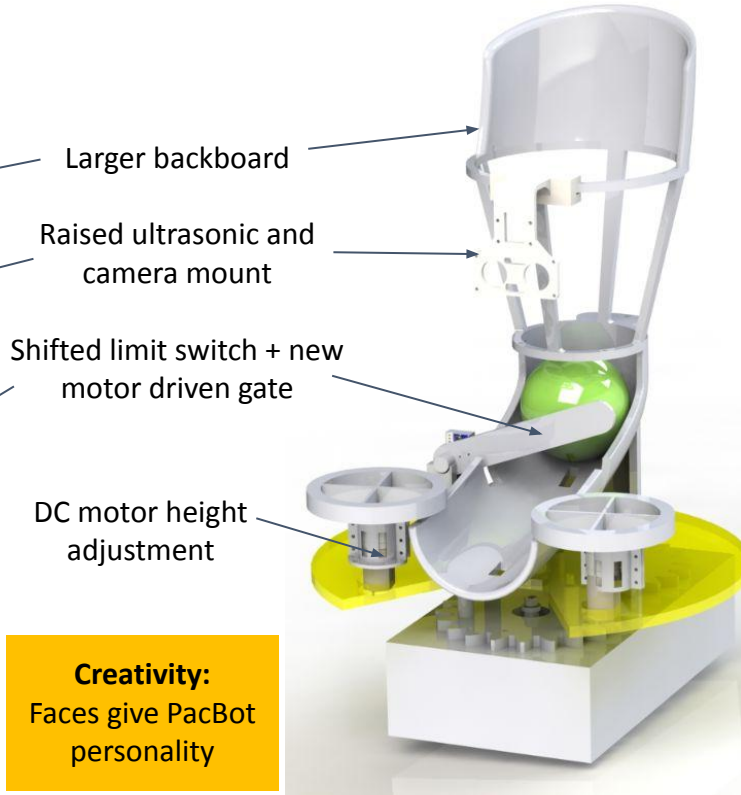


PacBot FunBot!

MECHANICAL DESIGN



ORIGINAL DESIGN



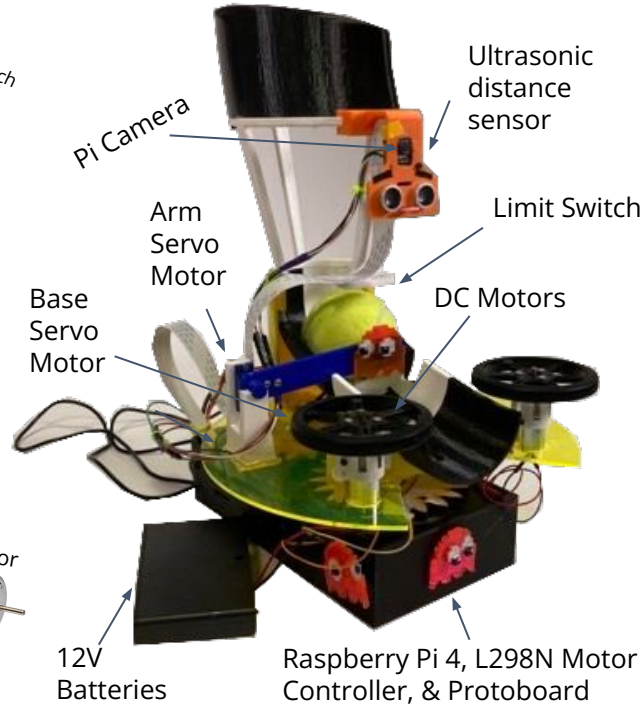
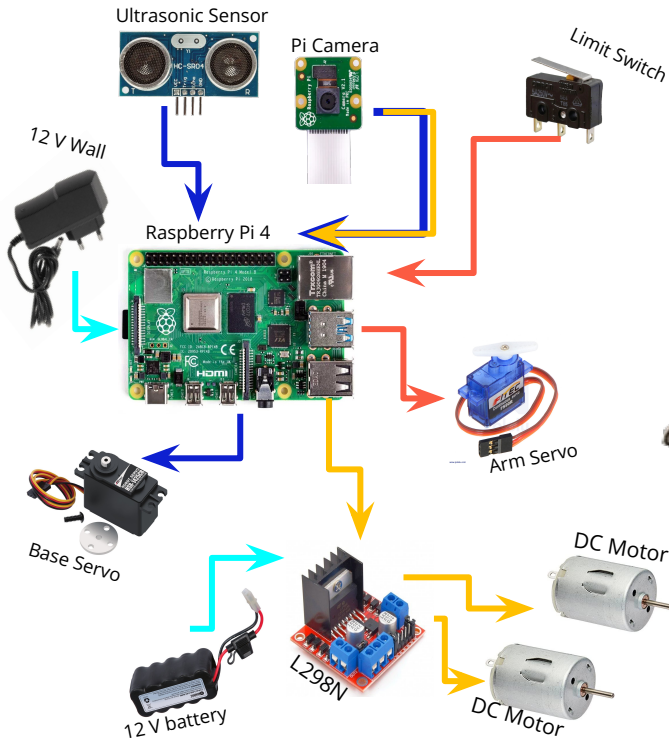
Creativity:
Faces give PacBot
personality

FINAL CAD



FINAL BUILD

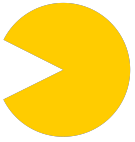
ELECTRONICS



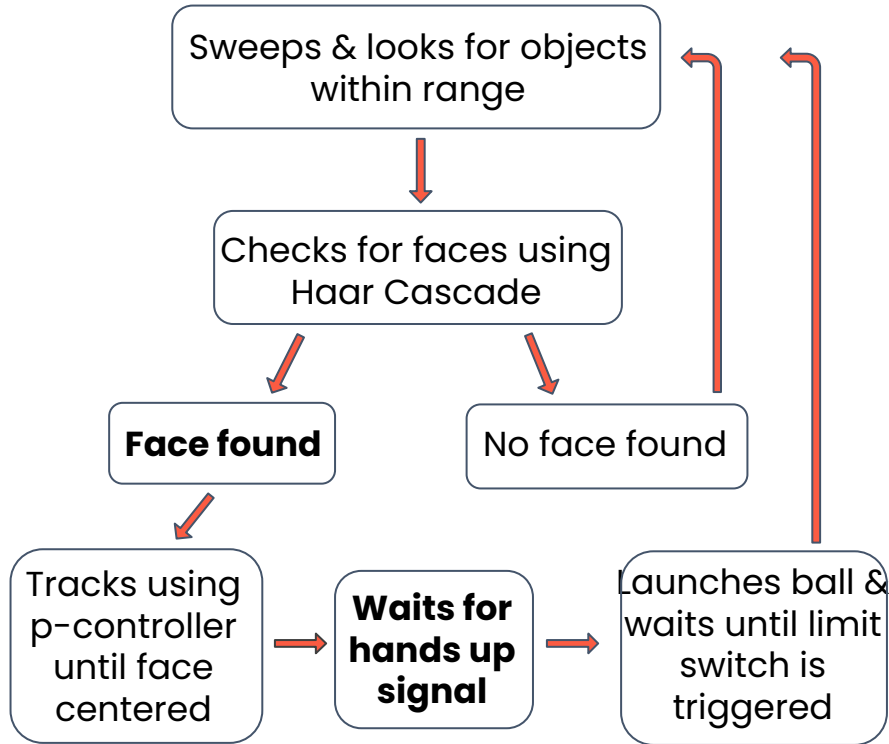
Creativity & Innovation

- Combined use of ultrasonic sensor and vision
- Limit switch to track ball return
- HRI design on camera and distance sensor
- "Tennis ball" shooter inspiration for motor system



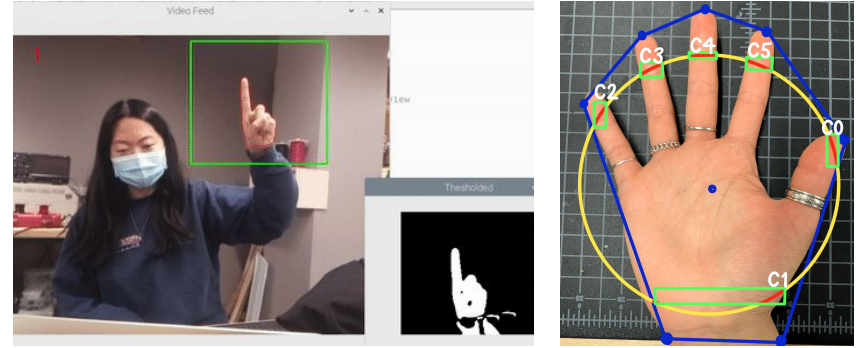


Code



Rebecca

Creativity & Innovation



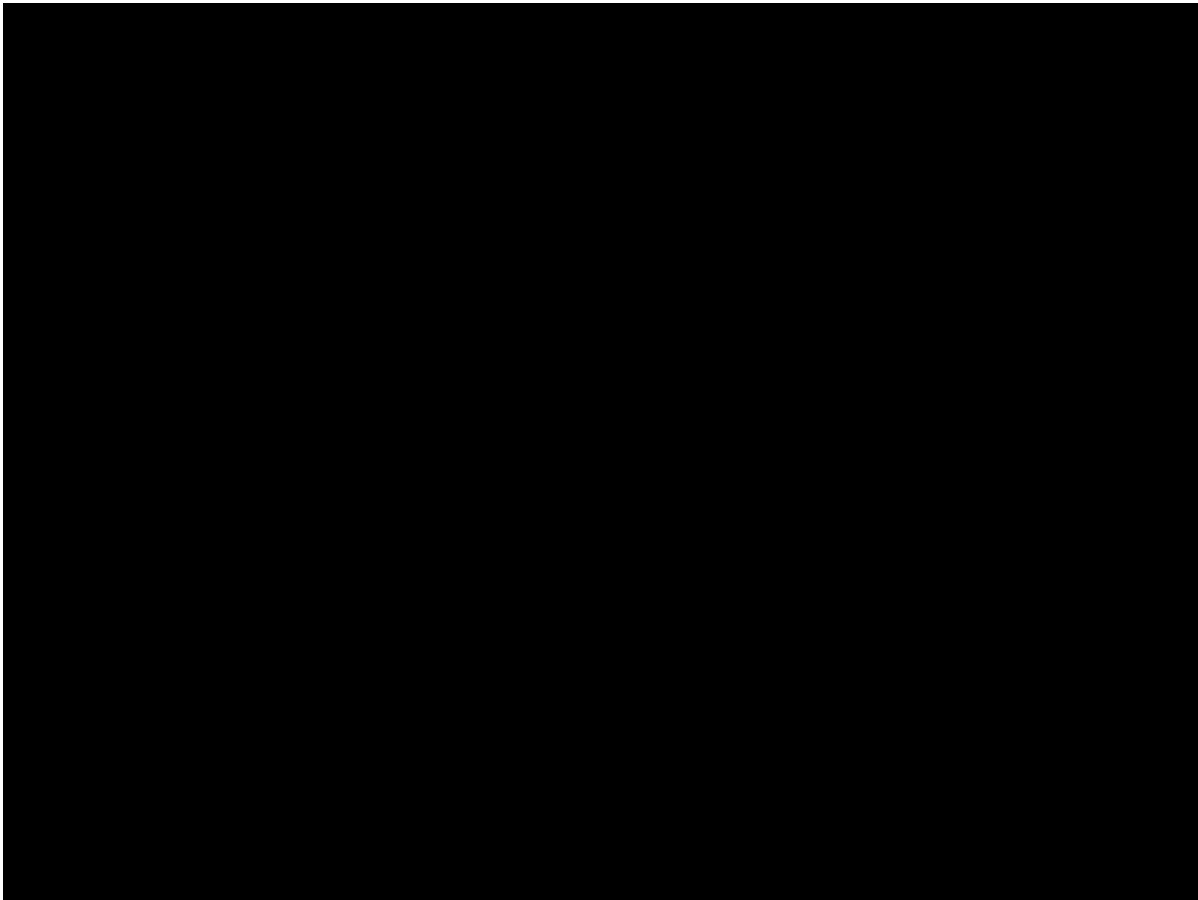
Finger Detection w/ OpenCV

Input: Thresholded image + segmented hand contour

Convex hull & AND operation b/t thresholded image and circular ROI

Output: Number of fingers

DEMO VIDEO



**THANK
YOU!**
