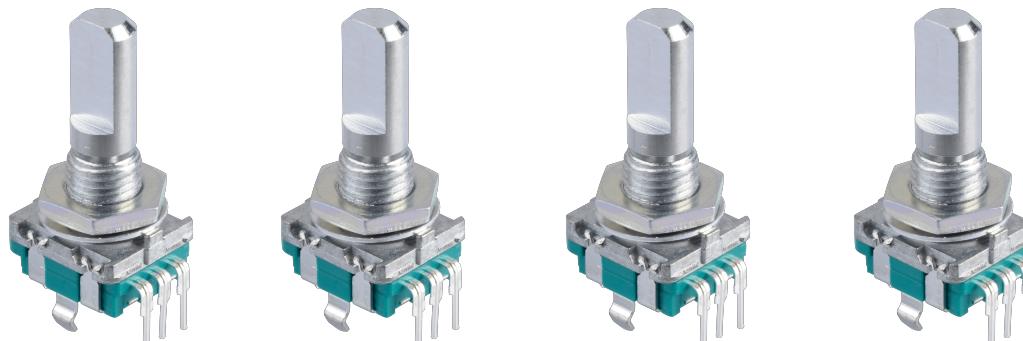


## Arduino-controlled robot arm

Sarim Abbas

### Rotary encoders – manual control



Shoulder    Elbow    Gripper    Base

### 3D-printed arm



Serial

### Game controller – manual control

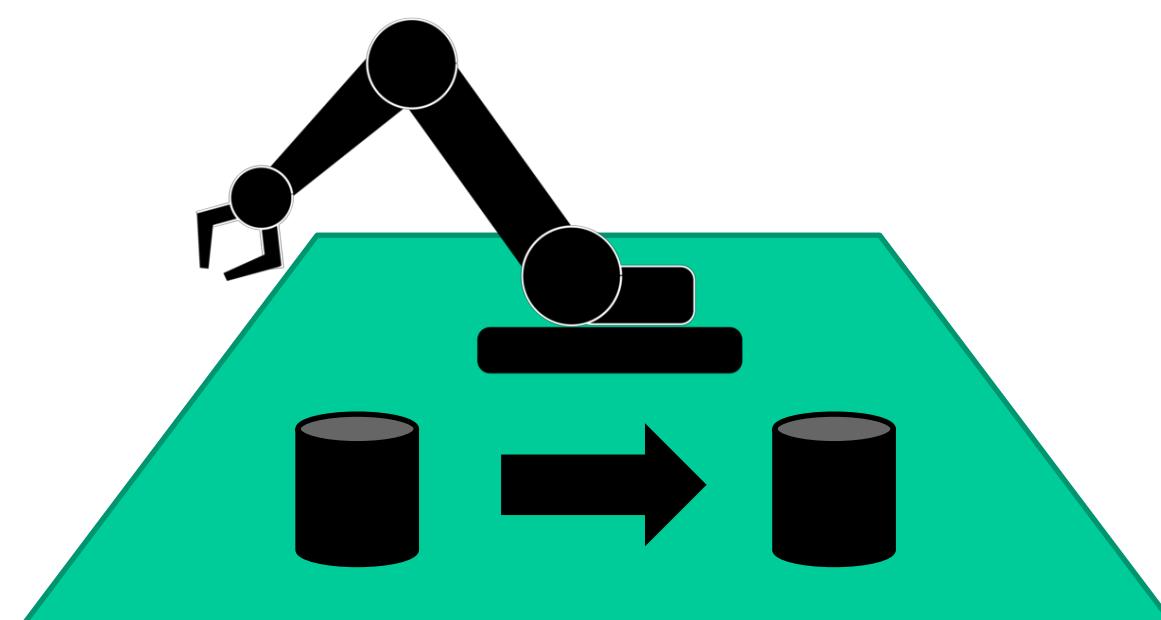


Host machine  
e.g. Raspberry Pi

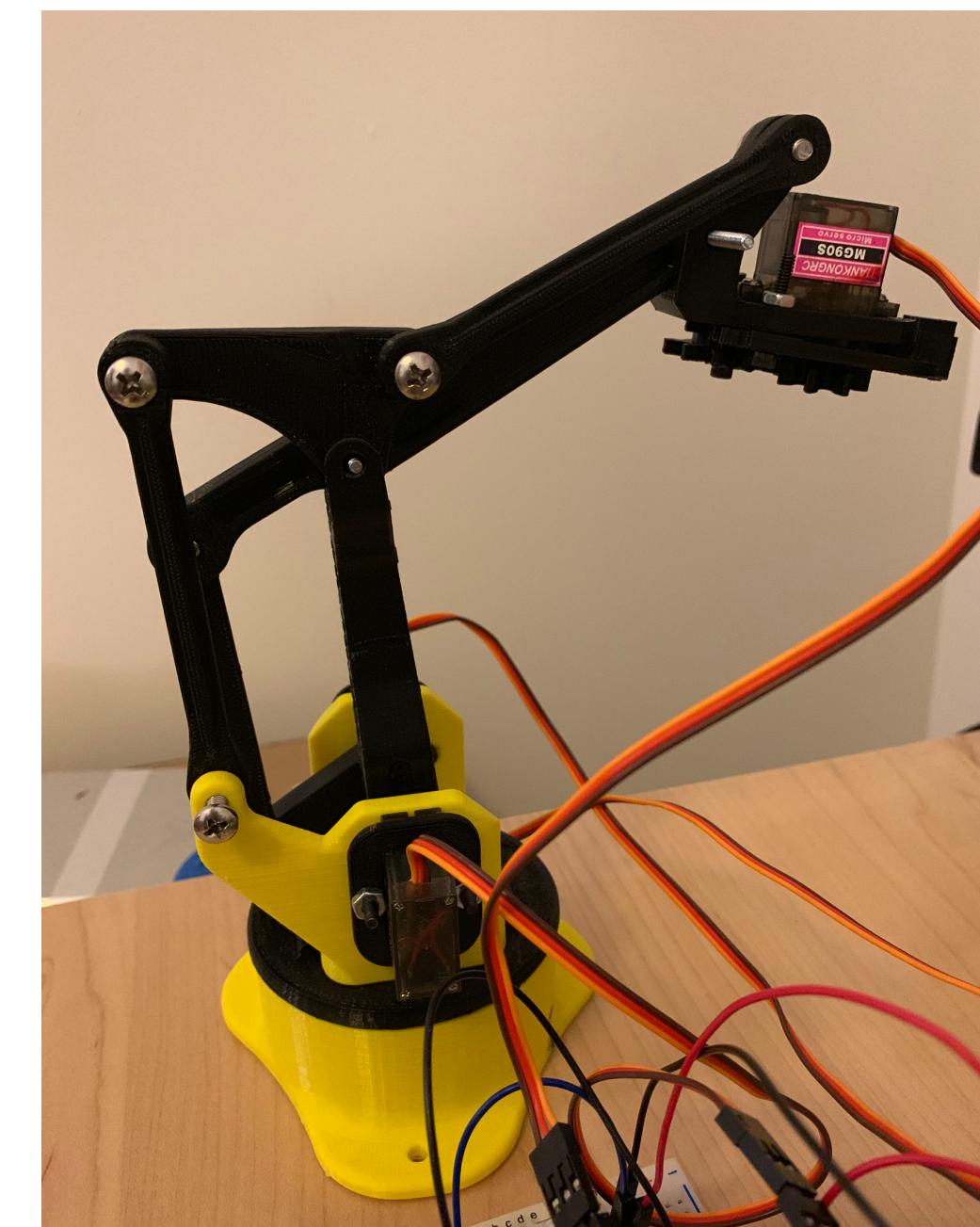


Controller

### Pick and place

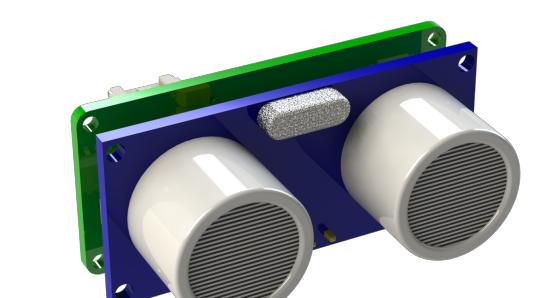


Currently scripted, but complex behaviors possible through use of ROS node on host machine.



Design based on EEZYBot Mk1, custom base plate  
4-DOF, SG90 servos with custom driver software

### Ultrasonic sensor – turtling behavior



Ultrasonic sensor

Proximity



Libraries:  

- PyGame
- ArduinoJson
- HC-SR04
- Encoder