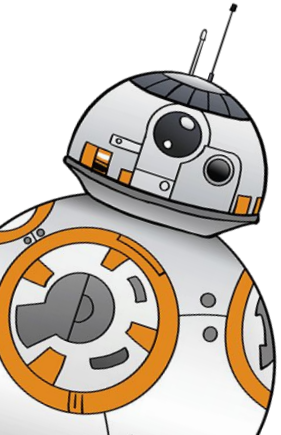
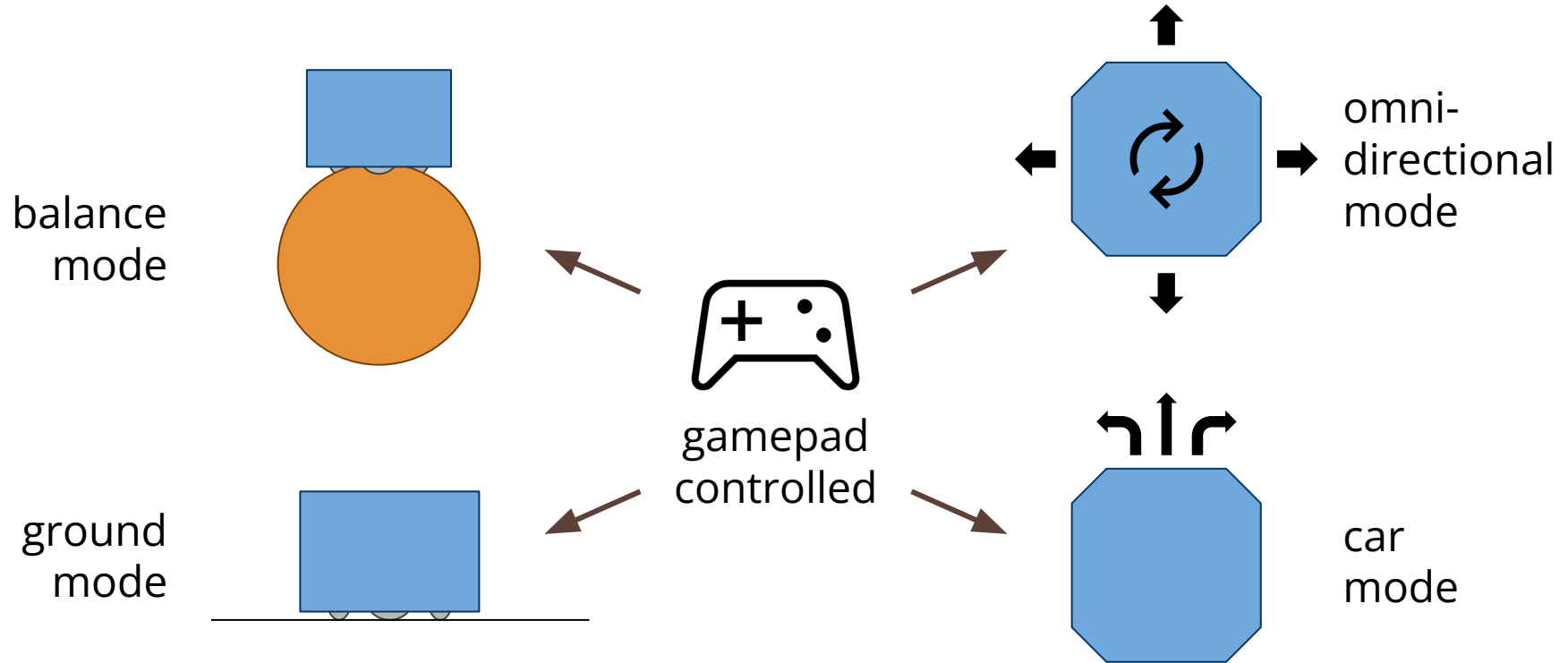


BALL-E

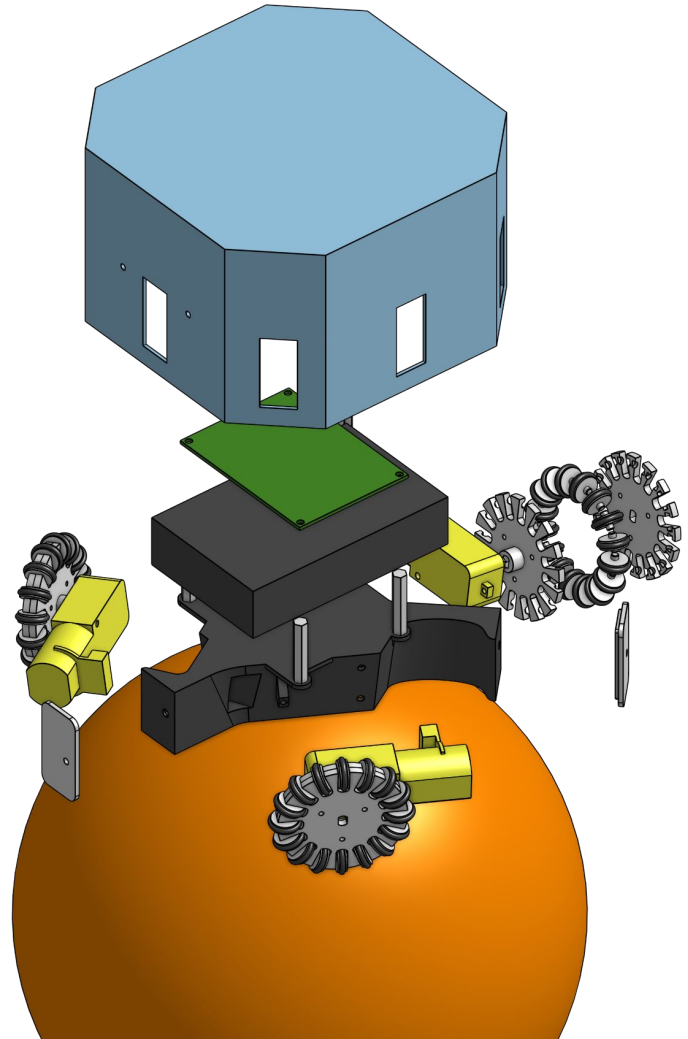
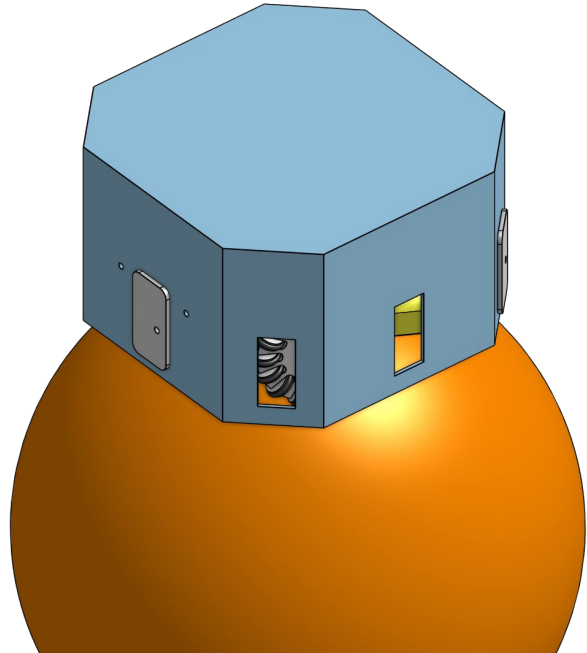
A Ball Balancing Robot



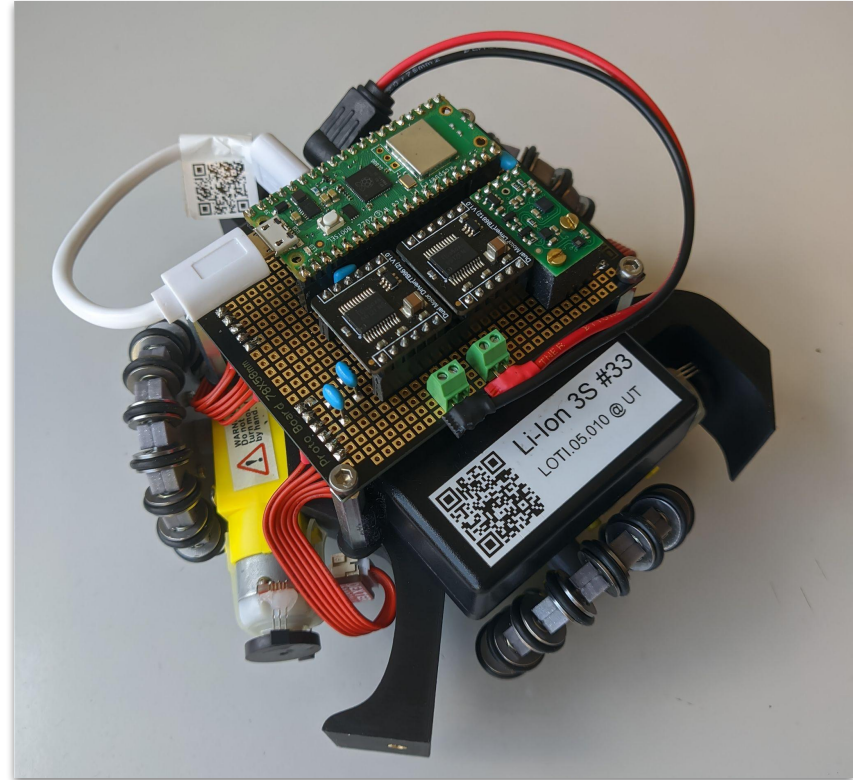
How Can It Move?



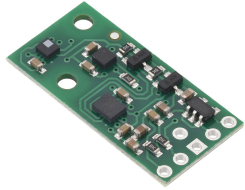
What's Inside?



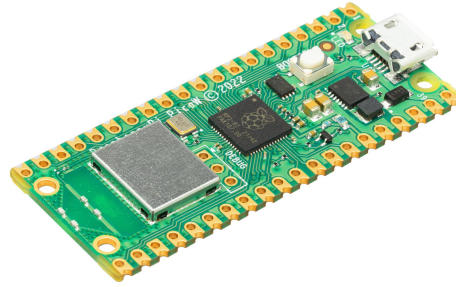
What's Inside?



Electronics



AltIMU-10 v6
Orientation



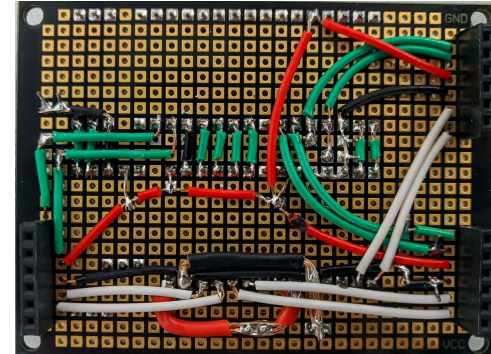
Raspberry Pi Pico W
Processing



2 x DF-DR10044
Motor Driver



3x GoPiGo3 Motor
Movement



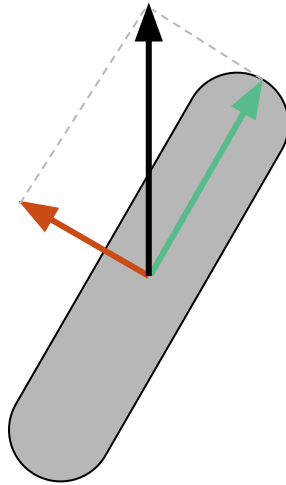
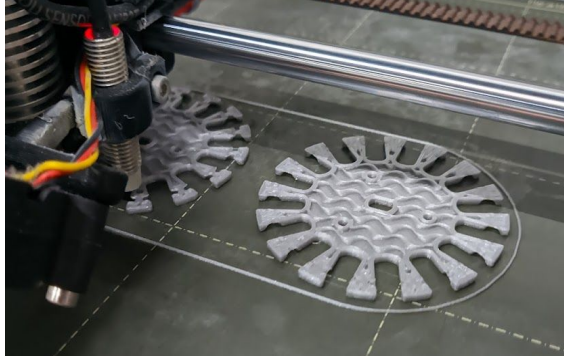
22x26 Protoboard
Connections



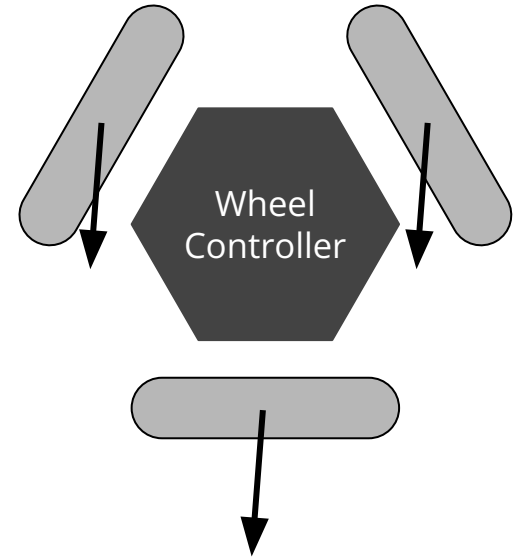
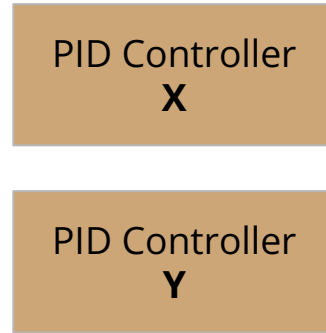
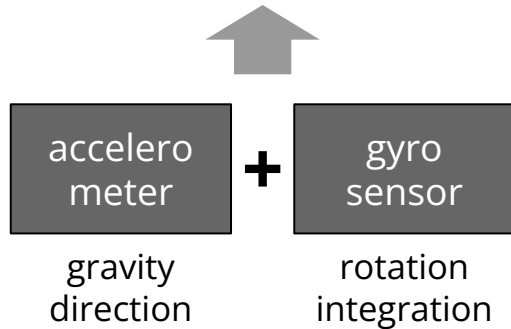
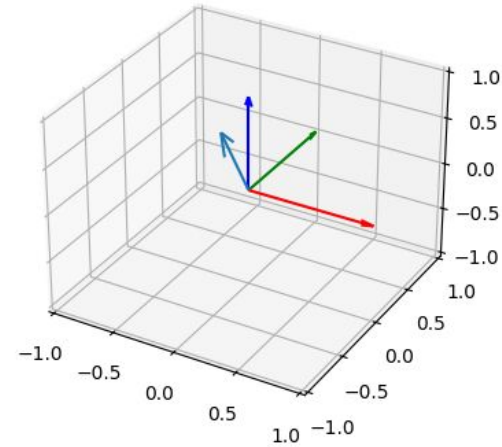
How Does It Work?



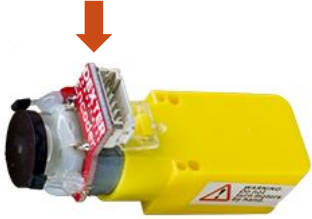
Omnidirectional Movement



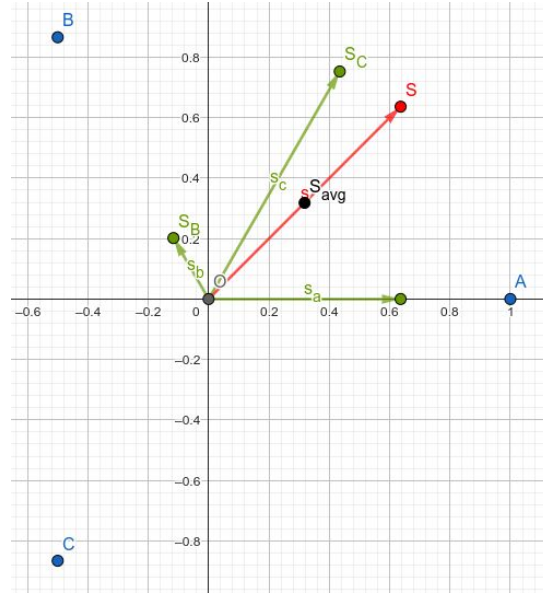
Balancing



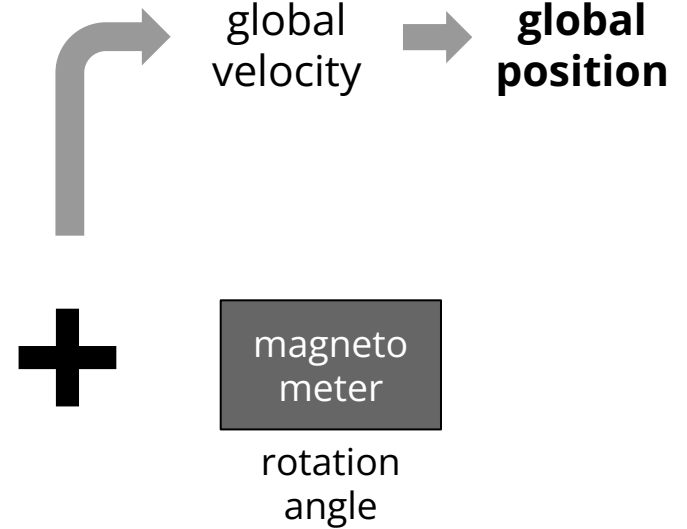
Position Tracking

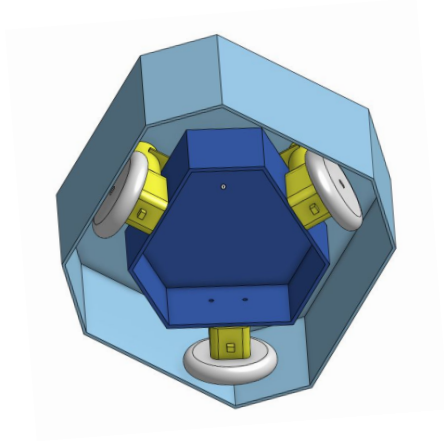


wheel
encoders



local velocity





Questions?

