Meet the Team (Again)

Team Lead
Cameron Bijan

PCB Lead
Dylan Vanmali

Test Engineer
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Test Engineer
David Donaldson

Software Engineer
Mark Wu
Computing
Communication Ports
Local Sensor Ports
Power
Programming and Wireless Ports
PCB

Introduction
Peripherals
Maglev Prototype
Web App
Object Detection

Introduction

PCB

Peripherals

Maglev Prototype

Web App
Stability Calculations

Introduction

PCB

Peripherals

Maglev Prototype

Web App
Positioning Data

Introduction
PCB
Peripherals
Maglev Prototype
Web App
Battery Management System

Introduction

PCB

Peripherals

Maglev Prototype

Web App
Connection to Maglev Motors
Maglev Prototype

- **Maglev** prototype
  - Four powerful maglev engines provide levitating force.
  - Proved viability of tilt propulsion
  - Showed promising acceleration
Maglev Prototype

- Scaled down prototype
  - (4 maglev engines and 4 servos)
- LiPo battery powers servos and engines
- ESC controls servos and engines using PWM signals from the microcontroller
Maglev Prototype
Maglev Motor Testing

![Graph: Acceleration Vs Tilt Angle](image)

- Introduction
- PCB
- Peripherals
- Maglev Prototype
- Web App
Maglev Prototype Progress

- Controls Testing
  - Timing profile
  - Sensor feedback using an ultrasonic sensor
- Currently integrating Webapp to PCB to gather sensor data
Web App

- Wirelessly monitors sensor data and event logs from the pod every second
- Sends signal to the pod for debugging and production purposes
Thank You Yoga, Celeste, and Caio