

Engineering Technology Robot Repair

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Introduction

- Analyze previously designed robot
- Redesign and repair components
- Communicate findings to robotics instructor:

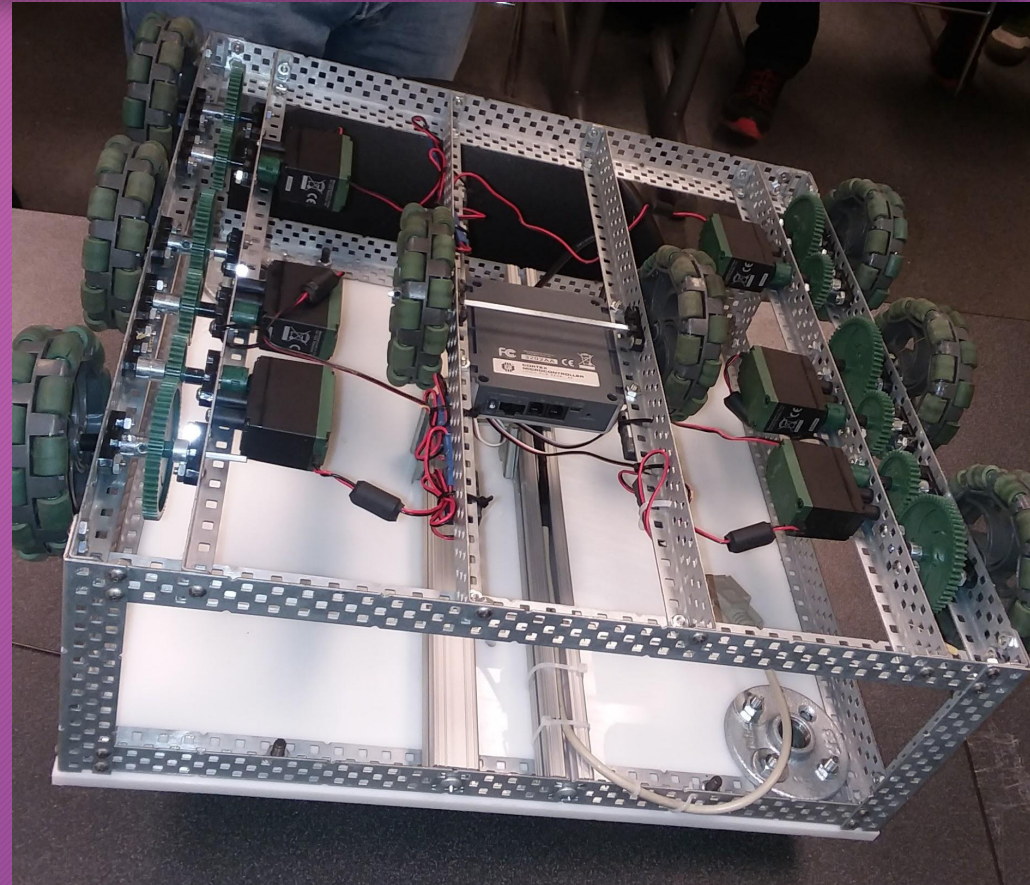
Robert Parker

Ivy Tech Robot - Background

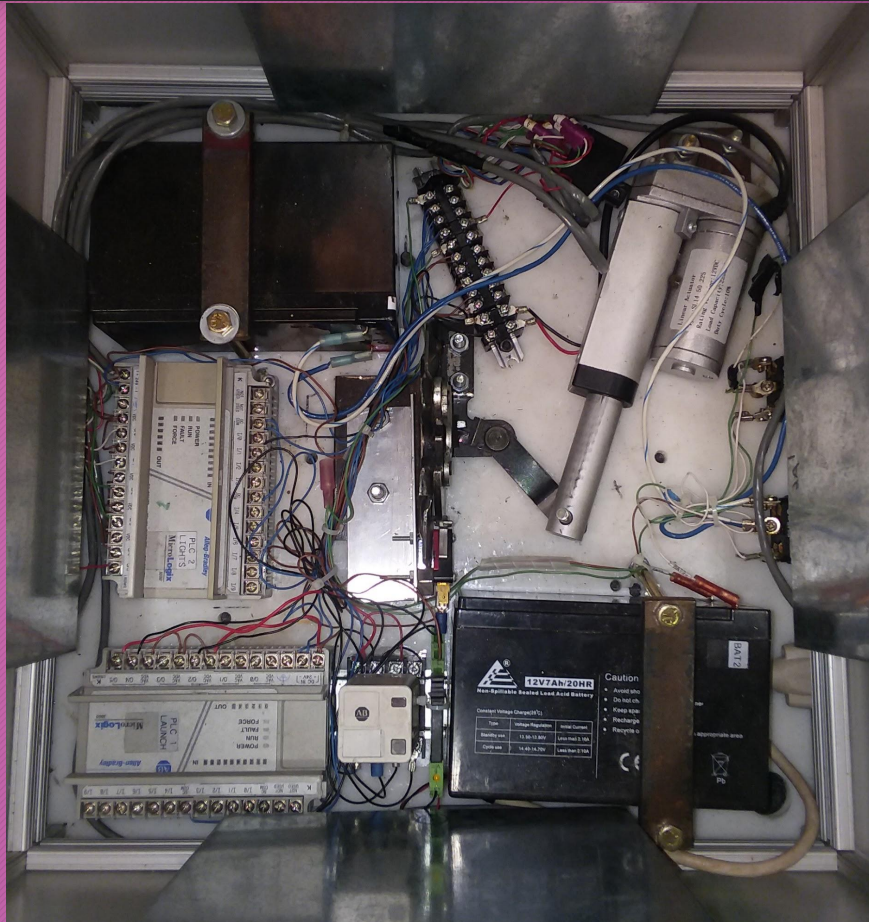
- Robot created by previous Ivy Tech students
- With the task to launch basketballs at events
- Came back from last event damaged and components missing

Ivy Tech Robot - Design

- Vex chassis
- Vex Brain
- Launching mechanism with non vex electrical components



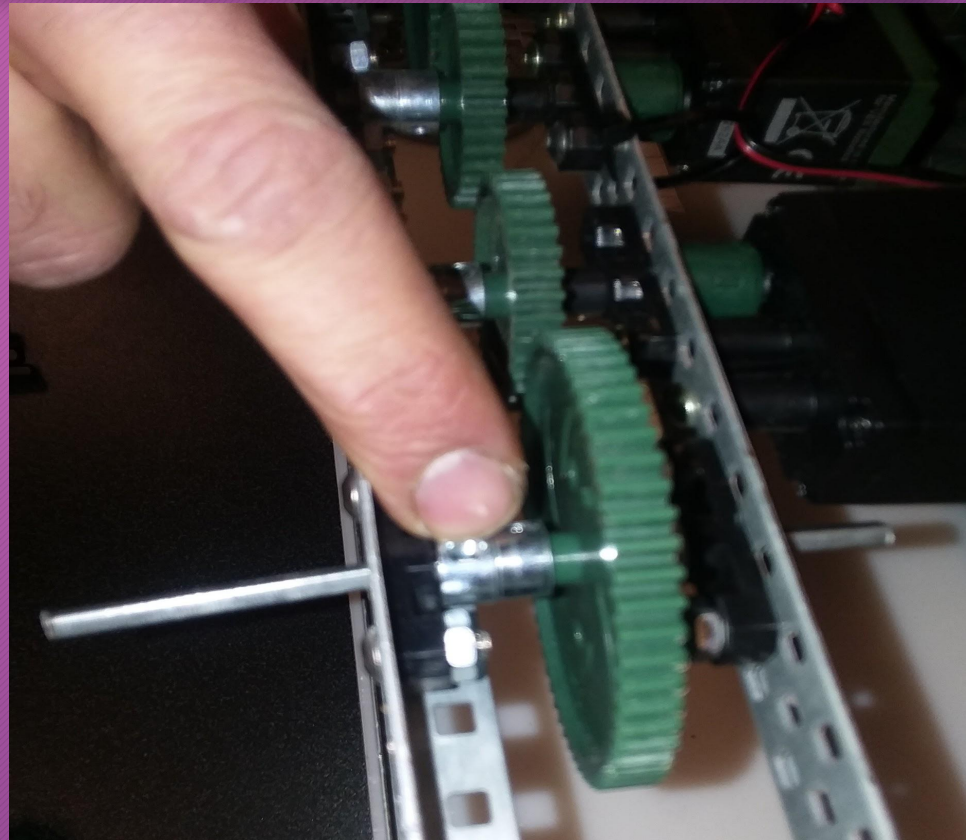
Ivy Tech Robot - Tasks



- Inspect robot for needed equipment and material
- Testing wiring
- Resourcing with robotics lab

Ivy Tech Robot - Discoveries

- Damaged chassis due to weight
- Missing controller
- Missing programming



Ivy Tech Robot - Accomplishments

- Gained new controller to pair with the brain
- Redesigned chassis for better support
- Replaced damaged parts
- Created programming

Drawbacks - Future work

- Conflicting materials
- Programming problems
- Unclear diagrams
- Inside components need program
- Improved wiring diagrams

Overall Learnings

- Basic understanding of SolidWorks
- Communication skills
- Team work skills
- Analyzing skills
- Problem solving skills

Thank you!