NASA Robotic Mining Competition (2021)

With Nathaniel Bouchie and Tony Godez
The Competition

- Design a Robot that can mine autonomously for a 15 minute run
Software Goals

● Autonomous Navigation
  ○ Random starting point and obstacles

● Autonomous Control System for Excavation and Delivery
  ○ Complexity is dependent on the hardware
Current Progress

- Zed Camera
  - Depth Sensing → Object Detection
  - Helps with positional tracking
- Motor Controllers
- (IFM Camera mapping shown)
Recommended Skills

- Python !!!
- Zed Camera API
- Work with hardware
  - Control motors via command line interface, etc.
Contact Info:

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