

NASA LUNAR MINING ROBOT



Problem Statement

Build an autonomous mining robot that can navigate, collect and deposit regolith.

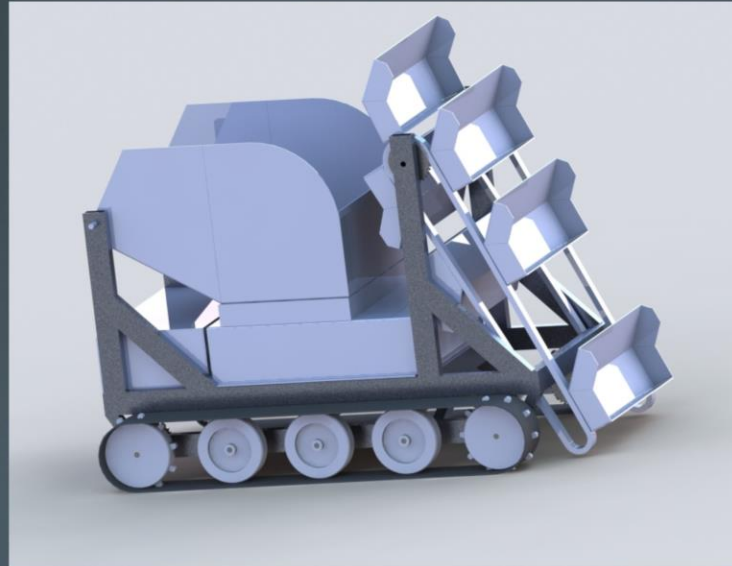
Motivation

Human colonization beyond earth will require harvesting lunar regolith for power.

Expected Outcome

A fully autonomous rover capable of terrain navigation and mining 50 kg of lunar regolith in 10 minutes.

Potential Design



Design Objective

- 1.5 m X 0.75 m X 0.75 m
- 80 kg max weight
- 50 kb/s data limit
- Minimal dust disturbance

Design Consideration

- Mobility- wheels, tracks or hybrid
- Mining of the Regolith- efficiency, dust disturbance, power

Team



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Timeline

