

## CARRIAGE INTAKE

DESIGN LEAD: Andrew Ng (sr.)

Combined intake to collect and score both hatch panels and cargo balls.

## CAMERA

SOFTWARE LEAD:

Alvyn Wang (jr.)

Takes four camera streams and transforms them into a single bird's eye view.

## GROUND INTAKE

DESIGN LEAD: James Jiao (sr.)

Spring-counterbalanced crowned rollers to center cargo balls into the carriage.

## DRIVETRAIN

DESIGN LEADS: Catherine Zheng (soph.),  
Anna Shaposhnik (jr.)

A robot base with 4 omni wheels for quick turning and 2 traction wheels for control. Hexagonal bumpers make the robot elusive against defenders. Features clean in-tube chain runs and over-the-wheel gearboxes with integrated electronics.

## ELEVATOR LIFT

DESIGN LEAD: Jonah Soong (jr.)

Our cascading elevator lifts the horizontal slider and carriage intake over six feet into air to deliver hatch panels and cargo balls. A constant force spring motor allows the elevator to lift up in just over a second.

## SLIDER

DESIGN LEAD: Sam Pickholtz (soph.)

Lead screw powered slider autonomously aligns hatch panels and cargo balls to the goals. The spring-counterbalanced pivot brings the carriage collector from the collecting to scoring position.

## CLIMBER

DESIGN LEAD:

Garrett Peake (sr.)

(a.k.a "The Cobra") Four bar linkage to raise the robot onto level 3 of the habitat platform in just 3 seconds!

