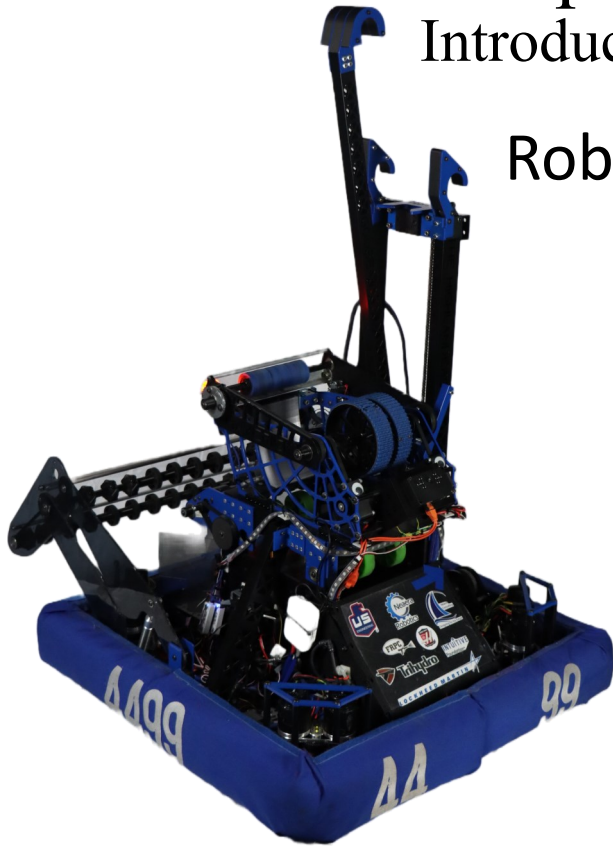


Team 4499 The Highlanders

Spec Sheet

Introducing: **Maverick**

Robot Details



Robot Specifications

Weight: lbs.125 lbs.
Full Height: 46"
Speed: 16 ft/sec
Main function: Quick high and low goal cycle robot
with a traversal climber

Drive Train

Swerve SDS MK4 L2
8 Falcon motors
Custom Swerve protectors

Intake

Ground pickup
4 bar linkage
Vectored wheels
Active control

Feeder

Holds 2 balls
Beam break sensor ensures consistent ball positioning
2 balls can be sent to shooter in under 1 second

Vision Processing

Auto targeting feature using LimeLight. 1 driver camera

Shooter

Flywheel (2 Falcons)
Backspin compensation roller
2 balls in 1 second
Adjustable hood

Climber

1 stage elevator with rotating arm on carriage
Powered by 2 falcons and neo 550
Spring loaded hooks to hold the bar
Climbs to traversal in 10 seconds
Can solo climb to low, mid, high and traversal bars

Autonomous

1 ball auto, 2 ball auto, 3 ball auto
4 ball auto, 5 ball auto
Auto path generation using Custom PathGen tool
and constant acceleration interpolation.