

Game Analysis

Action	Criteria	Match Points
		Auto , Teleop , end game
Deliver pixels/any game element	Deliver pixels onto back drop Or backstage or next to truss (only for auton) .Pixel = (3 inch width ½ in thick) 64 white 10 yellow ,green , purple	Auto - start off with purple and/or yellow - purple pixel in spike 10 or 20 each based if there is team prop . Backstage pixel 3 points . Back drop = 5 points Yellow pixel placed in corresponding location as one on spike mark = 10 pts or 20 if team prop used robots parked backstage = 5 Teleop - 1 point for backstage backdrop= 3pts mosaic with 3 pixels earns 10 pts. Each line crossed earns 10 points (Backstage). Endgame - score more if needed
Navigation	Navigate to correct locations	Auto - navigate to pick up pixels, score pixels . Score pixels next to team prop (randomized) Score team prop on back stage (randomized) Teleop - whatever needed Endgame - Backstage , truss to shoot drone , hang , park
Hanging	Suspended by rigging	Hanging = 20 pts (end game)
Shooting drone	Shoot drone out of field standing in front of rigging , truss	10,20,30 pts
Team prop	Score purple pixel next to , put prop on backdrop	10,20 pts

Game Analysis

Mechanism	Priority	Criteria
Intake	Must	Intake any angles
	Nice	Quick intake /outtake
	Explore	Encoders to detect angle of pixel make intake out take one mechanism
Outtake	Must	Grip/release pixels
	Nice	Lift/Elevator
	Explore	Being able to rotate outtake
Drone shooter	Must	Shoot out of field into any areas
	Nice	Get drone into last landing area
	Explore	Use algorithms to detect wind speed etc. to get right power /angle to get correct trajectory
Hanging mechanism	Must	Hang on bar
	Nice	Hang in timely manner
	Explore	Automatic hang mechanism / no need for alignment

Game Analysis

Description	Value	Unit	Other Considerations
Width	Less than truss	mm	
Height	Less than 12 in or 22 in	in	
Length	As long as needed	mm	
Weight	Maximizing weight and cg	kg	
Cost		USD	
Collection rate	1	sec/pixel	
Drive speed	4	sec/inch	
Vertical reach	35	in	