Game Analysis

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| --- | --- | --- | --- | --- |
| **Action** | **Criteria** | **Match Points** | | |
| **Auto** | **TeleOp** | **Endgame** |
| Deliver Pixels |  |  |  |  |
| Navigating |  |  |  |  |
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| **Mechanism** | **Priority** | **Criteria** |
| Intake | Must Have | * Able to intake pixels at different angles (fast rotating compliant wheels) |
| Nice to Have | * A quick intake to outtake transfer (possibly when robot is moving) |
| Explore | * Using encoders to detect pixel angle and adjust based on that * Make the intake and outtake in one mechanism instead of two separate mechanisms |
| Outtake | Must Have | * Grip/release pixels |
| Nice to Have | * Extensions to stack higher |
| Explore | * Being able to rotate the outtake when at different positions |
|  | Must Have |  |
| Nice to Have |  |
| Explore |  |
|  | Must Have |  |
| Nice to Have |  |
| Explore |  |

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| --- | --- | --- | --- | --- |
| **Engineering**  **Specification** | **Description** | **Value** | **Unit** | **Other Considerations** |
| 1 | Width |  | mm | The width and length dimensions should be much less than the given |
| 2 | Height |  | mm | Top must be sufficiently lower than the |
| 3 | Length |  | mm |  |
| 4 | Weight |  | kg |  |
| 5 | Cost |  | USD |  |
| 6 | Collection Rate |  | sec/pixel |  |
| 7 | Driving Speed |  | sec/pixel |  |
| 8 | Vertical Reach |  | mm |  |
| 9 |  |  | mm |  |

* 1. EasyOpenCV - Ajay
  2. Odometry/Roadrunner - Harsh
  3. Drivetrains - Dhruv
  4. Power Transmission - Kayan
  5. Intake/Outtake - Kavin
  6. Arms/Transfers - Srilakshminath