WOBOT Vision Software Control Document

Known Bugs and requested upgrades (High Priority):

* MAIN PROGRAM – Make something that can indicate the M/s of data going through the TCP coms to ensure that the camera stream is not shut down.
* MAIN PROGRAM – Make it so the user can calibrate the vision system from the dashboard.

Wish List Items (Lower Priority):

* MAIN PROGRAM – I would like to add better configuration support for each camera or make it easier to add configuration to the camera setup.
* MAIN PROGRAM – It might be nice to have a standard set file for each camera type.

2025 March 11

* MAIN PROGRAM – Updated the version to WOBOT 2020 Vision Ver. 25.3.11.1
* MAIN PROGRAM – Added a target package for the April tags
* MAIN PROGRAM – Added the calculation that get Yaw, Pitch and Roll for the AprilTag
* MAIN PROGRAM – Added a new distance measurement for the AprilTag that seems to work much better.
* MAIN PROGRAM – Added a new NT table system that can handle connections to the RoboRIO and the dashboard
* MAIN PROGRAM – Added a com loop to stream the target info to the RoboRIO
* MAIN PROGRAM – Added a battery display for the PC that runs the vision program, and we send this data to the dashboard
* MAIN PROGRAM – Made a coral target package to find the coral using vision
* MAIN PROGRAM – Updated the ball target package to the dimensions for this year’s game.
* CAMERA LOOP – Made it so we read all the settings out of the camera before trying to set the default values.
* MAIN PROGRAM – Added indicators for the driver station connection, RoboRIO target stream, RoboRIO communication, and NT tables connection.
* MAIN PROGRAM – Updated the streams to the NT tables to work with the new format.
* MAIN PROGRAM – Made it so the user can assign the camera to a target package if the target package is turned on.

2020 March 06

* MAIN PROGRAM – Updated the version to WOBOT 2020 Vision Ver. 1.0.0