This wiki covers the 1516B robot.

Team 1516B is a Vex VRC team based out of San Ramon, California. In this wiki, we try to explain the workings of our robot and how they were implemented and decided upon from a high-level perspective. This wiki resembles the extremely well made BLRS Wiki. Purdue SIGbots has made that wiki as a knowledge base for information about robotics and about the VEX ecosystem, while this wiki tries to take a more simple approach by focusing on describing our robot and its workings only.

Drivetrain

Currently, Team 1516B uses a 6 motor drivetrain with omniwheels for fast movement, and also uses gear ratios optimized for speed on the drivetrain. We aim for a fast drivetrain that can move the robot around and push triballs as well as one that has enough torque to overcome an opponent robot pushing ours backwards.

We put 4 motors in the back in order to save space in the middle for a triball holding area. As we have defined the game, Over Under, this year as a "pushing game", our intake serves moderately little use except as a holder for our beginning autonomous. Therefore, our drivetrain must be one of the strongest portions of our robot.

Resources

This page contains assorted external resources for the vex ecosystem.

BLRS Wiki - This is the BLRS wiki. It contains a lot of information on engineering, building, and many other things, and comes from the creator of PROS, Purdue SIGbots. Here is a relevant Vex Forum link.

Additionally, some other knowledge wiki-like information that was found are:

- 7842F Explanation - This is an explanation of the strategies used by a team to gain success. They have an advanced codebase, and it would be benificial to learn from their experiences.

Code Specific:

- PID tutorial
- Pure Pursuit Algorithm(Carrot on a stick)
- Implementation , LemLib , Okapi
- PROS Wiki