

Learning Robot Code

FRCLadder

FRCLadder provides a series of videos that together serve as a great introduction into robot code. We've selected some below that are particularly relevant to the programming YETI does.

Note: The hardware and APIs available have changed quite a bit since some of these videos were published. However, the concepts and theory behind them remain the same.

Introduction to FRC Programming and Basic Drivetrain Code

https://www.youtube.com/embed/ihO-mw_4Qpo?si=23MMYKgGsUODgW9I

How PIDs Work and How to Implement Them

Part 1: Dead Reckoning, Bang Bang, and using kP

<https://www.youtube.com/embed/jlKBWO7ps0w?si=FYxEzyTxH8kPpNjk>

Part 2: Using kI and kD

<https://www.youtube.com/embed/Z24fSBVJeGs?si=0kUkjiBfnQ8hoZy5>

Supplemental: A practical example of tuning a PID loop and how each value affects movement

<https://www.youtube.com/embed/qKy98Cbcltw?si=qPtB1oUdjG7YQsqg>

Revision #3

Created 26 April 2024 18:01:11 by Drew Beamer

Updated 5 October 2024 18:33:41 by Sam Perlmutter