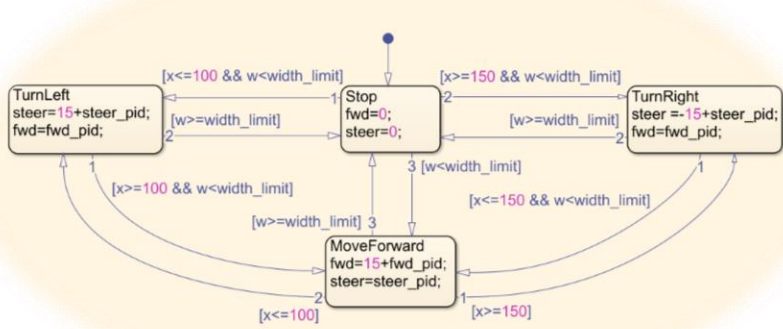


Why use MATLAB and Simulink for BEST Robotics?

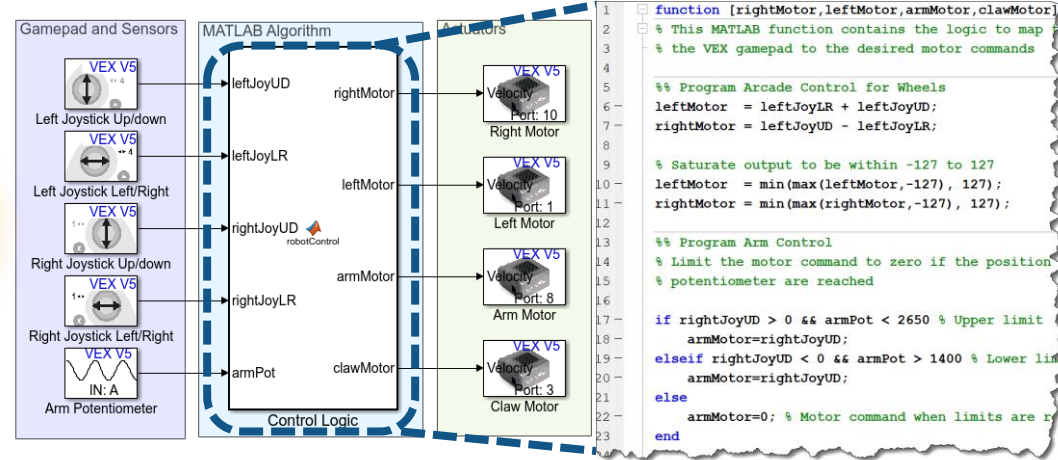
mathworks.com/best-robotics-guide



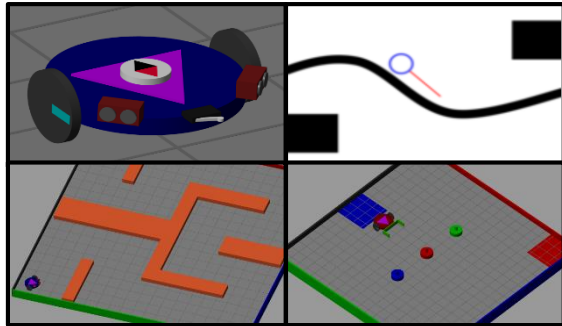
Flow Charts



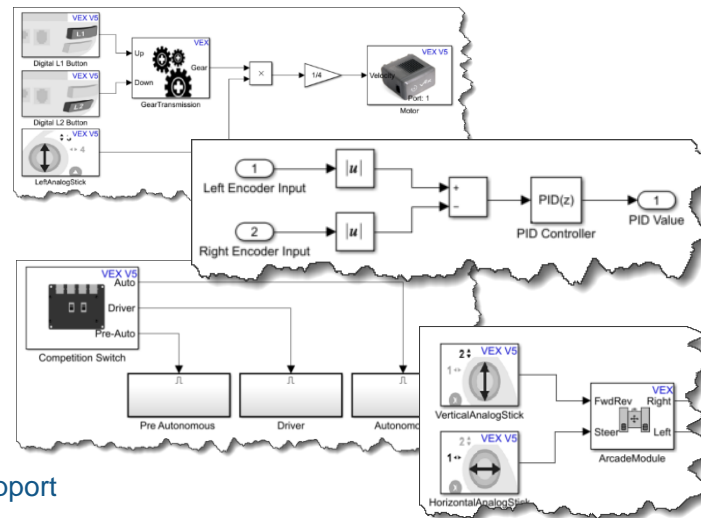
Graphical and Textual Programming



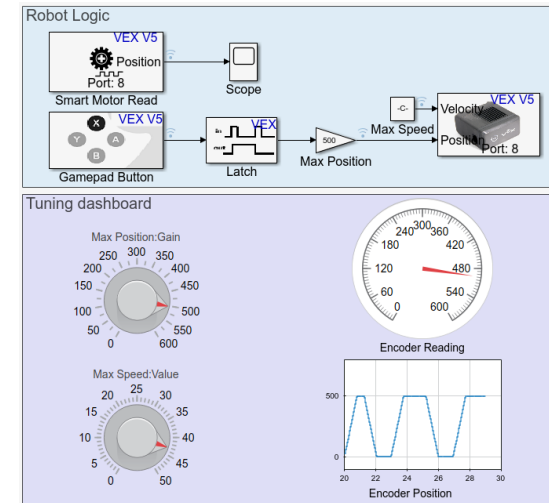
Simulations



Hardware and Control Libraries



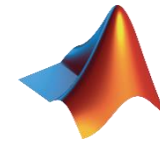
Parameter Tuning and Visualization



MATLAB and Simulink [VEX Cortex Support](#) available for **Windows only**

MATLAB and Simulink Getting Started Guide for BEST Robotics

mathworks.com/best-robotics-guide



Computer Setup

1. [Request Free License](#)
2. Install:
 - [MATLAB and Simulink](#)
 - [VEX EDR Libraries](#)
 - [VEX Companion App*](#)

Software Ramp Up

1. [Intro to MATLAB](#)
2. [Intro to Simulink](#)
3. [Intro to Stateflow](#)



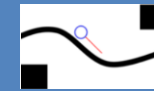
Robot Programming



Simulations

Mobile Robotics Tutorials

1. Autonomous Robot Motion
2. PID Controllers
3. Line Following Robots
4. Obstacle Detection
5. Path Navigation



Robotics Playground

1. MATLAB Programming
2. Autonomous Robot Motion
3. Simulink Modeling
4. Driver Controls
5. Distance Sensors
6. MATLAB Functions
7. State Machines
8. Maze Solving Robots



Additional Resources

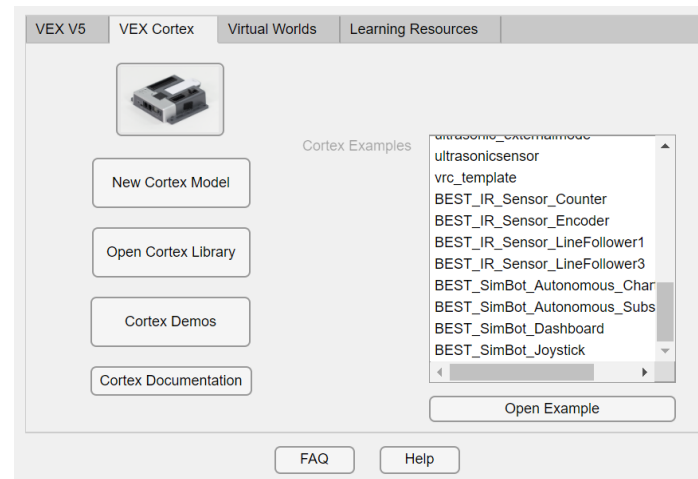
- [Programming the VEX ARM-Cortex Using Simulink](#)
- [Driver and Autonomous Control of VEX Robots](#)
- [Using Infrared Sensors for Robot Navigation](#)
- [Real time Debugging Using External Mode](#)
- [Robot Autonomy and Control Webinar](#)



[Documentation](#) [Facebook](#)



*VEX Companion



Questions?



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