piRover Builds with K2

Linux Investigation Rev 1.0

Overview:

The purpose of this lesson is to provide you with an introduction to Linux. You will use an online tutorial to experience an overview of Linux and learn basic Linux commands that are crucial tools when working in robotics. The amount of Linux used in this course is limited, and the activity will review only the first sections of the online tutorial. Students are encouraged to dive deeper by completing additional modules contained in the tutorial.

Prerequisites:

Prior to beginning the instruction provided in this lesson you must have completed the following:

1. Introduction to Raspberry Pi

Performance Outcomes:

1. Interact with the Linux command line interface
2. Navigate the Linux file system
3. Run applications and programs at the command line
4. Edit files at the command line.

Resources:

1. Linux for Robotics
2. Basics of CLI

Materials:

3. None

Directions:

1. The instructor will use the Robot Ignite Academy site to present Linux concepts and demonstrate command line usage including file system navigation. See the Linux for Robotics link in the Resources section.

2. During class time, create a free account on the Robot Ignite site. Complete Unit 1 and Unit 2 of the Linux for Robotics course as time permits.

3. Use the Basics of CLI link and other Web resources to review basic Linux commands including the following.

    a. cd – change directory

b. pwd – print working directory
c. ls – list
d. mkdir – make directory
e. mv – move
f. cp – copy
g. rm - remove

4. Optional: Continue to investigate advanced Linux utilities and applications presented in Units 3 and 4.

Assessment:

1. Complete Units 1 and 2 during the in-class time provided. At the end of the allotted time, grab a screen capture of your current window showing your status. Save this file as LinuxForRobotics.jpg and submit to the in-class assignment link.