e-Yantra Robotics Competition (eYRC 2018)

Task 0 – Ant Bot
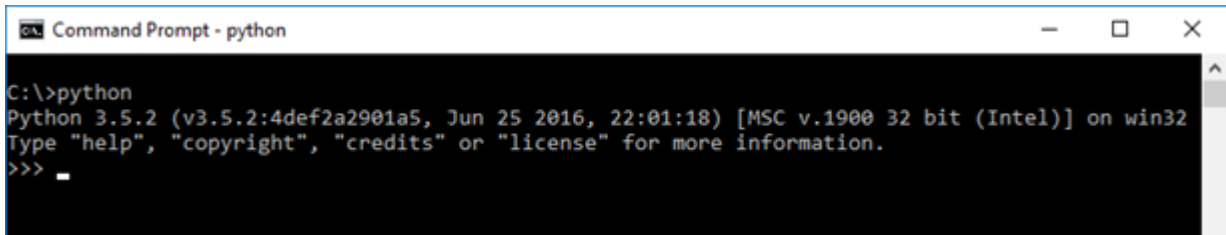
Software Installation

This file contains instructions to install following software/libraries:

1. Python

2. NumPy

3. OpenCV

4. pySerial

Please follow the steps given below:

1. **Python**

   ✓ Download Python from here

   ✓ Please ensure you download **Python 3.5.2 version only**

   ✓ Double-click the downloaded file to commence the installation. Follow the on-screen guidelines to complete the installation

     ❖ **Note: Select: Add Python to PATH checkbox while installing Python to automatically configure environment variable.**

   ✓ In order to verify the installation of python

     • Open Command Prompt, type *python* and press Enter

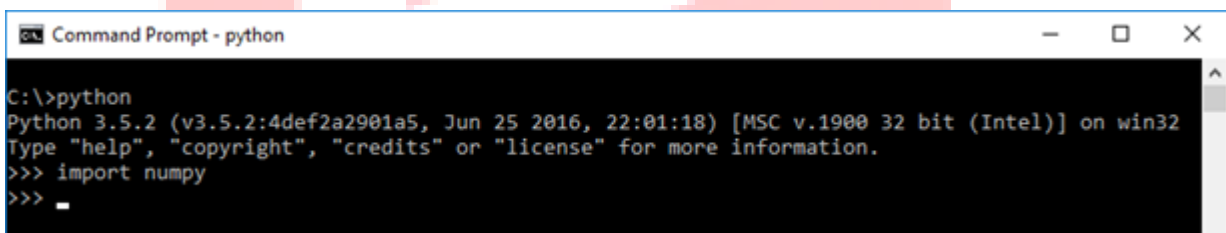   • You should see the prompt as shown in Figure 1 below:

Figure 1: Command Prompt with Python running

2. NumPy

✓ Open Command Prompt and type *pip3 install numpy==1.15.2.*

✓ In order to verify your installation,

- Open Command Prompt, type *python* and press Enter. This will open python prompt

- Type *import numpy* and press Enter

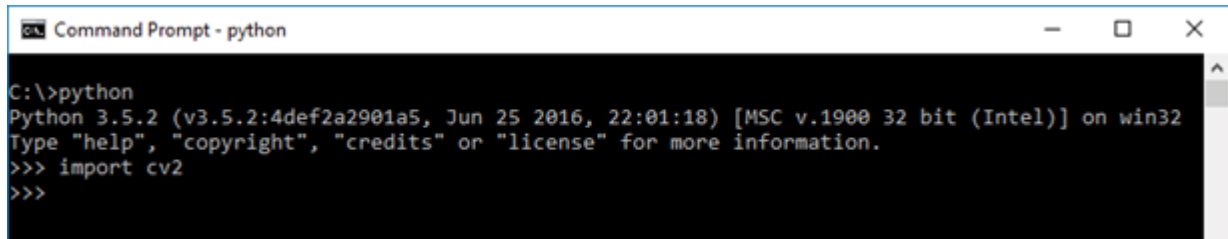- You should see the prompt as shown in Figure 2 below:

Figure 2: NumPy imported in Python prompt

3. OpenCV

✓ Open Command Prompt and type *pip3 install opencv-contrib-python==3.4.2.17*

✓ In order to verify your installation,

- Open Command Prompt, type *python* and press Enter. This will open python prompt

- Type *import cv2* and press Enter

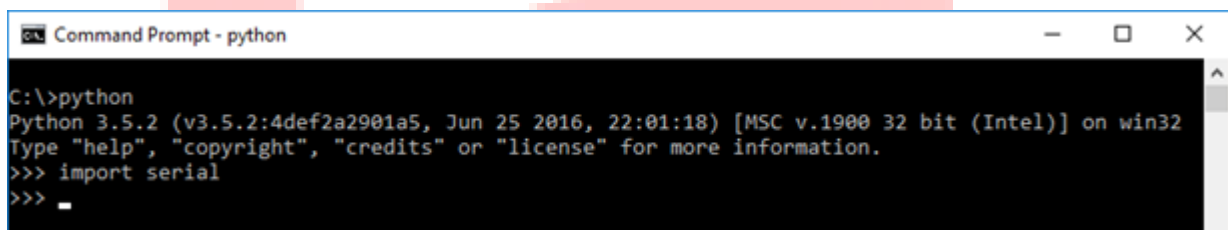- You should see the prompt as shown in Figure 3 below:

Figure 3: OpenCV imported in Python prompt

4. pySerial

- ✓ Open Command Prompt and type *pip3 install pyserial==3.4*

- ✓ In order to verify your installation,

    - Open Command Prompt, type *python* and press Enter. This will open python prompt

    - Type *import serial* and press Enter

    - You should see the prompt as shown in Figure 4 below:

Figure 4: Serial imported in Python prompt