e-Yantra Robotics Competition (eYRC 2016)

Task0 – Cross a Crater

Software Installation

This file contains instructions to install following three software/libraries:

1. Python

2. NumPy

3. OpenCV

Please follow the steps given below:

1. **Python**

   ✓ Download Python from here

   ✓ Please ensure you download **Python 2.7.x 32-bit version only**

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

   ✓ Next we have to configure the **environment variables**

   ● Right-click on *My Computer*

   ● Click of *Properties*

   ● Click on *Advanced System Settings* to open the *System Properties* dialog box

   ● Under System Properties, select *Advanced* tab

   ● Click on *Environment Variables*

   ● Under *System Variables*, search for variable *Path*

   ● Add *C:Python27;C:/Python27/Scripts;* at the start of the textbox

   ● Click on *OK*

- ✓ In order to verify the installation of python

    - ● Open Command Prompt, type *python* and press Enter

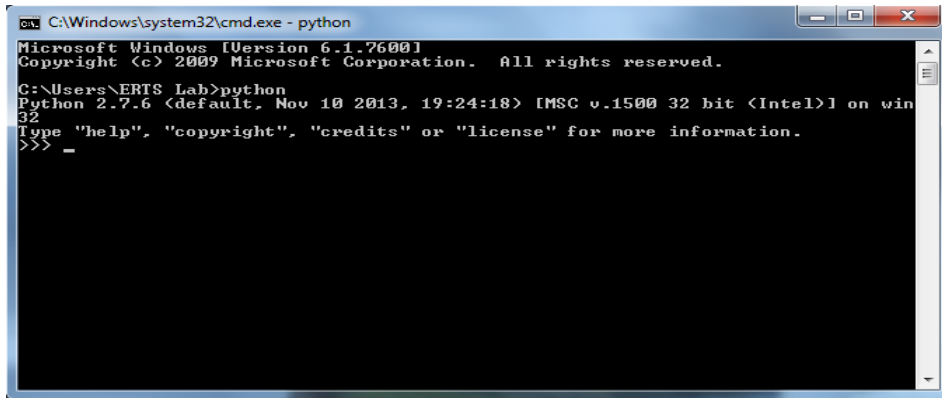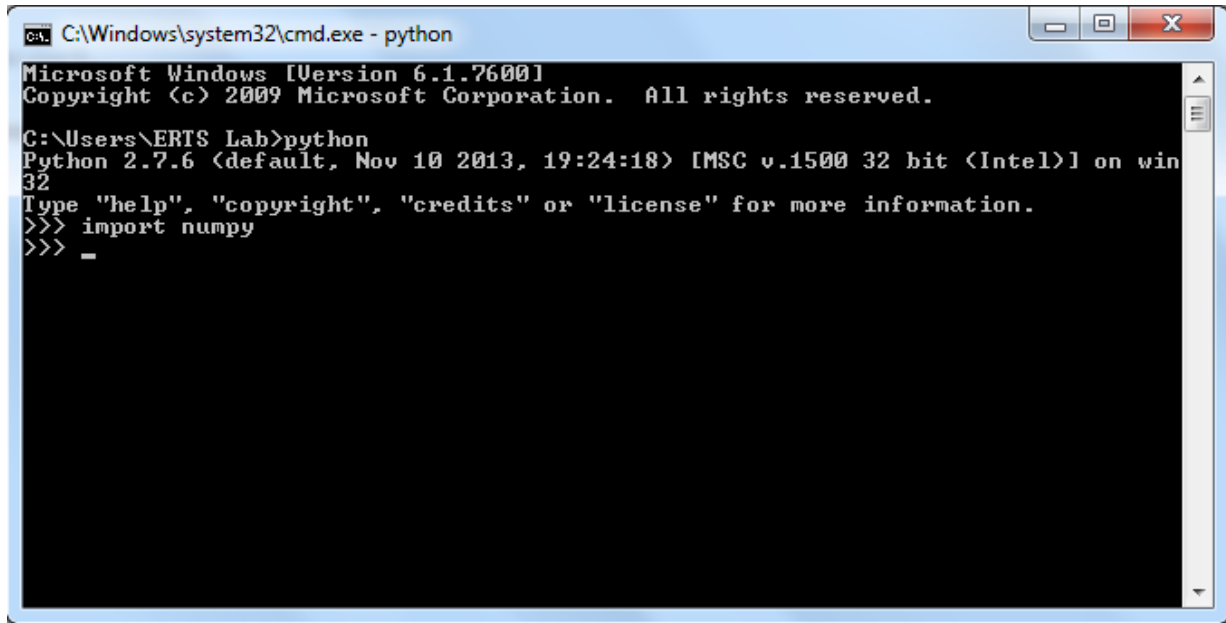   - ● You should see the prompt as shown in figure-1 below

Figure-1 Command Prompt with Python running

2. NumPy

- ✓ Download NumPy from here

- ✓ Please ensure you download **NumPy 1.8.2 version only**

- ✓ Make sure you download **.exe file only**

- ✓ Double-click the downloaded file to commence installation

- ✓ 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

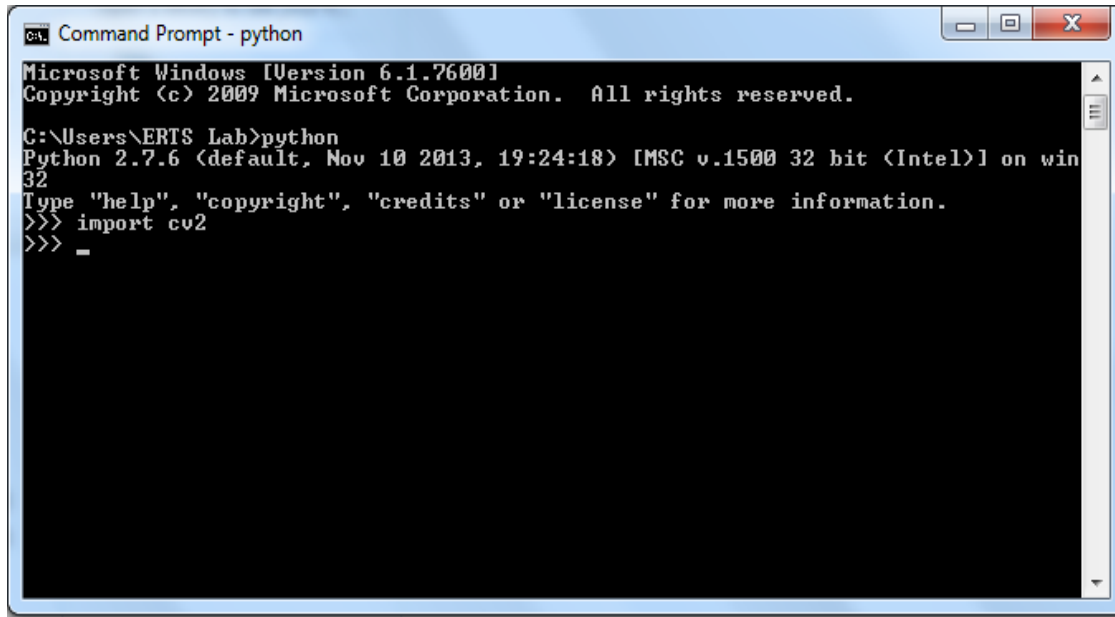   - ● You should see the prompt as shown in figure-2 below

Figure-2 NumPy imported in Python prompt

3. **OpenCV**

✓ Download OpenCV from here

✓ Please ensure you download **OpenCV 2.4.13 version only**

✓ Double-click the downloaded file to commence installation

✓ Navigate to the folder opencv/build/python/2.7

✓ Copy the file cv2.pyd to C:/Python27/lib/site-packages

✓ 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