

# **International Conference on Recent Trends in Engineering & Technology**

*Bengaluru, Karnataka, 20<sup>th</sup>&21<sup>st</sup>, June 2018*

## **Automated Robo Soccer using OpenCV**

**Shashank M.G.**, PES University.

**Sudha D.**, Asst. Professor, Vemana IT, Bengaluru

### ***Abstract:--***

In today's fast advancing aeon of the Internet, A novel branch of study has emerged known as "Internet-of-Things". The project mainly consists of study, development and carrying out of a model for Automated Robo Soccer i.e, tracking circular object using the Python programming language which provides OpenCV libraries. This project also exhibits how different electronic devices like a processor, motors, web camera etc., work together without a physical connection to solve given problem at the hand. This model makes use of an Raspberry-Pi3-Model B as the microprocessor using which the implementation has been done. Python is a powerful Object Oriented Programming language which can be used in alternate to matLab for image processing, data analytics etc. This paper exhibits the student project work on recognition of ball and taking it to its destination using the Python OpenCV library.

### ***Index Terms:--***

Internet-of-Things (IoT), Raspberry Pi (RP), OpenCV, SciPy, NumPy

20<sup>th</sup>-21<sup>st</sup> June 2018

ICRTET – 18

ISBN: 978-81-937041-8-9

*Organized by:*

**Vemana Institute of Technology**

*And*

**Institute For Engineering Research and Publication (IFERP)**