**Group-No-14**

**Project Title:- “OBJECT DETECTION ON RASPBERRY PI”**

Abstract:-

The project mainly focuses on the basis to implement the object detection and tracking in brightness as well as darkness which is a visual based project i.e., the input to the project will be the single video/image data which is continuously captured with the help of a webcam which is interfaced to the Raspberry Pi.

The Raspberry Pi is a basic embedded system and being a low cost a single board computer used to reduce the complexity of systems in real time applications. This platform is mainly based on python. Raspberry pi consist of Camera slot Interface (CSI) to interface the raspberry pi camera. Here, the Dark and Low contrast images captured by using the Raspberry Pi camera module are enhanced in order to identify the particular region of image.

For better image processing we are using graphics processing unit (GPU) which increases graphics-rendering performance on raspberry pi .

Keywords: Image Capturing, Raspberry Pi, Camera Module, Python , GPU.

Project Outcome:-

1. Object detection in night vision.
2. Better image processing by GPU.
3. Reduce the complexity of system by using raspberry pi.

**PO-Mapping of Project:-**

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