ECE Capstone program  
Spring 2017  
Summary Project info

Please provide the following information to be shared with on capstone information exchange platform:

1. **Project number**: s17-11

2. **Project title (as will appear on the poster)**: Parking Management

3. **Team members**: Daniel Maas, Jacob Voorhees, Nil Patel, Jasel Patel

4. **Adviser(s) name(s)**: Vishal Patel

5. **Up to 10 keywords that will help to classify the project**: Parking, Computer Vision, OpenCV, Python, Raspberry Pi, Parking Management, Navigation, GPS, Histogram, Department of Transportation

6. **Project abstract (up to 200 words) to be shared with judges**:

Parking management is a new platform provided to the public that redefines parking. This project will discuss an approach to implementing a parking management system. The implementation uses a Raspberry Pi Zero with computer vision capabilities and custom python software. This system analyzes a parking lot and provides the appropriate data to the user informing which parking spots are available for use. This solution is aimed towards the general public and can also be utilized by commercial clients for the use of efficient and affordable parking lot management. The system can be employed in residential/commercial parking lots and in metropolitan or suburban areas. There are many ideas that could be developed in the near future, such as reserving parking spots.