## SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore-560057

## Department of Computer Science and Engineering

## Certificate



Certified that the project work entitled "Smart parking system to detect car and parking slots in open spaces" carried out by Amogh N Kulkarni (1SG13CS128), Madhusudan K (1SG14CS411), Preethan Reddy G (1SG13CS074), Supreeth K (1SG13CS116) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science an Engineering of Visvesvaraya Technological University, Belgaum during the academic year 2016-17. It certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the repodeposited in the department library. The project report has been approved as it satisfies the academ requirements in respect of Project work (10CS85) prescribed for the said degree.

| Figure of the Guide       | Signature of the HOI |
|---------------------------|----------------------|
| Mrs. Kamalakshi Naganna 🦯 | Dr. Prashanth C.M.   |
| Associate Professor       | Professor & Head     |

Signature of the Principal

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| Name of the Examiners | Signature with date |
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## **ABSTRACT**

The problem of parking lot in urban areas has become a rampant one due to the increasing population. This happens as the cars increase in number but the parking space remains constant. The proposed application that detects the car and empty parking slots in open space. The application reads the training dataset and extracts features from the images which are used to train the support vector machine algorithm which is used for classification of images. The application is given a test dataset which process the images in the same way as that of training dataset, extract the features and classify the images accordingly.