**Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY**

**(An Autonomous Institution, Affiliated to VTU, Belgaum, Aided by Government of Karnataka)**

**Near JnanaBharathi Campus, Mallathahalli, Bangalore – 560056**



**A MINI PROJECT REPORT ON**

***“SEGREGATING IMAGES BASED ON CONTENT”***

Submitted by

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**[1DA15CS067] [1DA15CS069]**

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**CERTIFICATE**

This is to certify that the project entitled “**Segregation of Images Based on Content**” submitted in the partial fulfilment of the requirement of the 6th semester Mini project curriculum during the year 2015-16 is a result of bonafied work carried out by

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Internal Examiner

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**Manu Hegde**

**Mohan Krishna S**

**ABSTRACT**

As the name suggests “Segregation of Images Based on Content”, the software segregates images based on their features and not based on what the image is. The aim of this project is to map a given set of files based on their similar and dissimilar features i.e map similar ones nearer and vice versa to the dissimilar ones. We use various machine learning techniques such as Convolutional Neural Network for extracting the feature set from the images, which is present at the penultimate layer of the CNN and this feature set is passed to t-sne algorithm which segregates similar features by assigning floating points to the files.

The floating points are later used in UI to represent the images at respective coordinates, which gives us the clear cut picture of how the segregation has been done. We can show the output in 3D ( greater precision) – like a sphere of images, 2D (optimal) – plotting the images in x y plane, 1D (loss of precision) – displaying the images linearly. In our project we have displayed the output in 2D plane which gives us clear picture of how the segregation has been done.

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