# IMAGE RETRIEVAL AND OBJECT DETECTION

MAJOR PROJECT REPORT

*Submitted in partial fulfillment of the requirements for the award of the degree*

*Of*

**BACHELOR OF TECHNOLOGY**

in

**INFORMATION TECHNOLOGY**

By


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Under the guidance of

**MR. ARUN DUBEY**


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# CANDIDATE'S DECLARATION

It is hereby certified that the work which is being presented in the B. Tech Minor Project Report entitled " **IMAGE RETRIEVAL AND OBJECT DETECTION**" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology and submitted in the Department of **Information Technology of Bharati Vidyapeeth College Of Engineering College, New Delhi**

**(Affiliated to Guru Gobind Singh Indraprastha University, Delhi) is an authentic record of** our own work carried out during a period from January 2018 to May 2018 under the guidance **of Mr. Arun Kumar Dubey, Assistant Professor.**

The matter presented in the B. Tech Major Project Report has not been submitted by me for the award of any other degree of this or any other Institute.

**(Anita Kumari)** **(Palak Garg)** **(Anuradha R. Pai)**

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge. He/She/They are permitted to appear in the External Major Project Examination.

**Mr Arun Kumar Dubey, Assistant Professor, IT.**

# ABSTRACT

In the recent years there has been an explosive growth in the number of images that are produced daily. Technological advancements, creation of the World Wide Web are some factors that have contributed to this sudden rise in image data. This vast collection of images is hard to be handled with conventional methods of image processing. So, to overcome this problem, there was a need for a new method which could handle this huge amount of images and also provide accurate results to the user. Therefore, we have described a novel approach of 'Content Based Image Retrieval' .There was also need for the development of an robust and efficient object detection system.Object recognition is the process by which objects are detected within images and videos. Object detection can be used for various purposes including retrieval and surveillance.

Thus,in this report we describe method of image retrieval using CBIR and perform object detection using TensorFlow API.

**KEYWORDS**: Content Based Image Retrieval (CBIR), Feature Extraction, Image Retrieval,Object Detection,TensorFlow .

# ACKNOWLEDGEMENT

It is a great pleasure and opportunity for us to be able to work on this project. We express our profound gratitude to the people who have been instrumental in the successful completion of this project. The knowledge and values inculcated at the very start of our career are conductive to our growth. We would like to acknowledge the valuable support provided by our project guide Mr. Arun Dubey who has been always there to help us in carrying out this project, acting as the guiding spirit behind the compiling of this project report.

Without his tremendous support, motivation and help, this project would not have borne the results that it has.

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