

**CONTENT BASED IMAGE RETRIEVAL USING BAG OF  
VISSUAL WORDS WITH BRISK**

*A project report submitted in partial fulfillment of the requirements for  
the award of the Degree of*

**BACHELOR OF TECHNOLOGY**

**In**

**COMPUTER SCIENCE AND ENGINEERING**

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## CERTIFICATE

This is to certify that the project entitled "CONTENT BASED IMAGE RETRIEVAL USING BAG OF VISUAL WORDS WITH BRISK" in partial fulfillment for the of degree of Bachelor of Technology in COMPUTER SCIENCE AND ENGINEERING, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bonafied work carried out by B.LAVANYA(14811A0510),R.BHAGYALAKSHMI(14811A0558), T.SIVAPRASAD(14811A0569),k.V.SURENDRA(14811A0530), S.VENKATESH(14811A0567) under the guidance and supervision during 2017-2018.

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## ABSTRACT

In the recent computerized world, the world wide web consists of large number of images. The main task of the user has been to retrieve the most similar images from its numerous image database. Text based image retrieval is being widely at present. Because of its disadvantage of manual annotation and keyword search approach, a new method called CBIR(Content based image retrieval) came into existence and several methodologies have been proposed based upon this approach.

In our project, we have proposed a method for content based image retrieval system which employs Bag of Visual Words approach with BRISK(binary robust invariant scalable keypoints) method for detecting low level feature descriptors for image comparison. Using BRISK method the query image is compared with database images. There by database images are divided into dataset based upon keypoints. Images that are similar to query image based upon brightness level energy values from the image database.

The performance of proposed system is evaluated by counting the number of correctly retrieved images and incorrectly images from the image database. We are able to obtain good accurate results in most of the test cases.