

# SAPTHAGIRI COLLEGE OF ENGINEERING

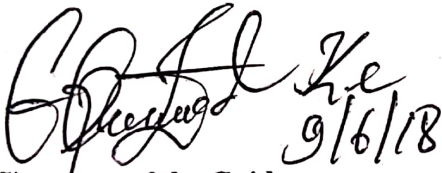
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

*Department of Computer Science and Engineering*

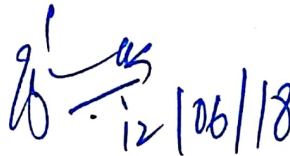


## Certificate

Certified that the Project Work entitled **"PRIVACY-PRESERVING HIGH-ORDER ALGORITHM FOR BIG-DATA CLUSTERING USING CLOUD COMPUTING"** carried out by Neeraj Singh Sajwan (1SG14CS064), Puspak Jindal (1SG14CS087), Ravi Prakash Kumar (1SG14CS093), Sagar Srivastava (1SG14CS096) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year 2017-2018. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of **Project Work (10CS85)** prescribed for the said degree.

  
9/6/18

Signature of the Guide  
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12/06/18

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Signature of the Principal  
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Principal

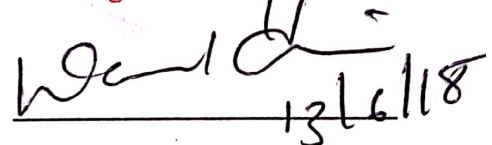
### EXTERNAL EXAMINATION

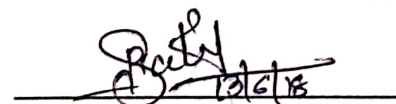
#### Name of the Examiners

1. K. Ramreddy

2. Ramanagouda. S. patil

#### Signature with Date

  
13/6/18

  
13/6/18

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## ABSTRACT

Fuzzy C- Means is a Clustering method that allows each data point to belong to multiple clusters with varying degree is membership. PCM is one of the methods used for C-means Clustering process and image analysis. The Process find out the two types of Clustering's like normal PCM clustering and important is HOPCM like for Big data clustering. The HOPCM method based on Map Reduce. Finally, a privacy-preserving HOPCM algorithm (PPHOPCM) to protect the private data on cloud by applying the BGV encryption scheme to HOPCM. To tackle this problem, proposes a high order PCM algorithm (HOPCM) for big data clustering. Clustering is designed to separate objects into several different groups according to special metrics, making the objects with similar features the same group. With the increasing popularity of big data, big data clustering is attracting much attention from data engineers and researchers.