Visvesvaraya Technological University
Belagavi, Karnataka-590 018

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PROJECT REPORT

ON

"K-NEAREST NEIGHBORS ALGORITHM"

Submitted in partial fulfillment of the requirements for the ***Computer Graphics Laboratory with Mini Project (15CSL68)*** *course of the 6th semester*

BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING

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CERTIFICATE

This is to certify that the project work entitled "***K*-NEAREST NEIGHBORS ALGORITHM**" is a bonafied work carried out by **Mr. PREETHAM D P (1JS15CS074)** and **Mr. SHRAVANTH V Y (1JS15CS095)** in partial fulfillment for the Computer Graphics Laboratory with Mini Project (15CSL68) of 6th semester **Bachelor of Engineering** in **Computer Science and Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year 2018-2019. It is certified that all corrections and 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 prescribed for the said degree.

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1)……	**……**
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ABSTRACT

KNN (k-nearest neighbor) is an extensively used classification algorithm owing to its simplicity, ease of implementation and effectiveness. It is one of the top ten data mining algorithms, has been widely applied in various fields. KNN has few shortcomings affecting its accuracy of classification. It has large memory requirements as well as high time complexity. Several techniques have been proposed to improve these shortcomings in literature. In this paper, we have first reviewed some improvements made in KNN algorithm. Then, we have proposed our novel improved algorithm. It is a combination of dynamic selected, attribute weighted and distance weighted techniques. The accuracy of our algorithm is improved with a blend of classification and clustering techniques. Experimental results have proved that our proposed algorithm performs better than conventional KNN algorithm.

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