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## KLE Technological University, HUBLI – 580031



**SCHOOL OF COMPUTER SCIENCE & ENGINEERING**

A Project Report on

# “Classification of Handwritten Bengali Alphabets and Kannada Digits”

## Submitted by

**Pratibha M Goudar - 01FE20MCS010**

Under the guidance of

## Dr. Meena S .M

**School of Computer Science & Engineering KLE Technological University, HUBLI – 580031 2020 – 2021**

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**2020– 2021**



**SCHOOL OF COMPUTER SCIENCE& ENGINEERING**

**CERTIFICATE**

This is to certify that minor project entitled **Classification of Handwritten Bengali Alphabets and Kannada Digits is** a benefied work carried out by the student **Ms. Pratibha M Goudar** 01**FE20MCS010**, in partial fulfillment of the completion of 2nd semester M. Tech course during the year 2020- 2021. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

**Guide P. G. Coordinator Head, SoCSE**

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| --- | --- | --- |
| **(Dr. Meena S.M)**  **External Viva: Name of Examiners** | **(Dr. Vishwanath P. Baligar)** | **(Dr. Meena S.M.)**  **Signature with date** |
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| **2.** |  |  |

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# ABSTRACT

The technology of object recognition has advanced in recent times. There are so many models that performed brilliantly when used to detect English handwritten alphanumeric characters. But when it comes to Bengali handwritten grapheme classification and kannada MNIST these predefined models slightly underperformed. The complexity of Bengali grapheme and unavailability of a good dataset are the main reasons for the underperformance of these models. So, the problem still quite unsolved. But in Bengali grapheme recognition some of the models performed very well. We propose a Deep Convolutional Neural Network model to recognize Bengali handwritten graphemes and kannada handwritten digit recognisation. The dataset used in this experiment is pretty good and have trained the model and test the models and get accuracy of models.

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