**Yashwantrao Chavan Maharashtra Open University, Nashik**

School of Computer Science

A PROJECT REPORT

ON

**DIGIT RECOGNIZER**

Presented and Submitted By

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Towards The Partial Fulfillment of the

**Bachelor of Computer Application**

PATKAR VARDE COLLEGE

MUMBAI

**Yashwantrao Chavan Maharashtra Open University, Nashik**

School of Computer Science

[2017-2018]

**Yashwantrao Chavan Maharashtra Open University, Nashik**

School of Computer Science

**CERTIFICATE OF EVALUATION**

This is to certify that the project

“DIGIT RECOGNIZER”

Has been satisfactorily completed by

ARSALAAN DOKADIA

Towards the fulfillment of the ‘Bachelor of Computer Application’,

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**Signature of the Examiner Stamp of Study Center**

**Yashwantrao Chavan Maharashtra Open University, Nashik**

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**CERTIFICATE OF COMPLETION**

This is to certify that the following student

Of B.C.A have completed the project

“DIGIT RECOGNIZER”

Under my guidance and supervision.

ARSALAAN DOKADIA

The project report has been written according to

The guidelines given by the

‘Yashwantrao Chavan Maharashtra Open University’.

Signature of the Study Center Coordinator Signature of the Guide

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**Yashwantrao Chavan Maharashtra Open University, Nashik**

School of Computer Science

**ACKNOWLEDGEMENT**

With immense please I am presenting “Digit Recognizer” Project report as part of the curriculum of ‘Bachelor of Computer Application’. I wish to thank all the people who gave us unending support.

I express my profound thanks to our head of department, project guide and project incharge Mr. “Sameer Kamble”, and all those who have indirectly guided and helped us in preparation of this project.

ARSALAAN DOKADIA

**Project Guide**

* Mr. Sameer Kamble
* Mr. Chayan Bhattacharjee

**PROJECT SYNOPSIS**

**ON**

**DIGIT RECOGNIZER**

**BY.**

**MR. ARSALAAN DOKADIA**

**PROJECT SYNOPSIS**

**Description**

This application provides unique features for Digit Recognition. This will correctly predict the digit drawn using the Convolutional Neural Network from a dataset of tens of thousands of handwritten images. A Convolutional neural network implemented in pure python. Convolutional Networks allow us to classify images, generate them, and can even be applied to other types of data. It uses a MNIST (“Modified National Institute of Standards and Technology”) dataset with about 10 numeric digits.

MNIST is the small dataset of computer vision. Since its release in 1999, this classic dataset of handwritten images has served as the basis for benchmarking classification algorithms. As new machine learning techniques emerge, MNIST remains a reliable resource for researchers and learners alike.

**Purpose**

* To recognize the digit.
* Optical Character Recognition (OCR).

**Project Scope**

Initial functional requirements will be: -

* Just to identify the digits drawn in browser and predict the correct output.

**Technology Platform**

* Operating System: Windows 7 or above (64 bit), Linux (64 bit)
* Programming Language: Python, Flask, Keras {Atom editor}
* Backend: Tensorflow.

**Hardware Requirements**

* Processor: Intel core I series & AMD Ryzen series or higher.
* RAM: 4 GB or above
* Hard Disk: 10 GB or above

**Project Guide**

* Mr. Sameer Kamble
* Mr. Chayan Bhattacharjee

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