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]

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',
For the Academic Year [2017-2018] at Patkar Varde Center, Mumbai,
Yashwantrao Chavan Maharashtra Open University, Nashik
(School of Computer Science), and it is approved.

Signature of the Examiner

Stamp of Study Center

School of Computer Science

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

Name of the Study Center Coordinator

Signature of the Guide
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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

INDEX

Introduction to Python	1
Python Features	2
Introduction to Keras	3
➤ Advantages of Keras	4
Introduction to TensorFlow	5
NumPy	6
TensorFlow vs Numpy	8
Introduction to Flask	9
Artificial Intelligence	10
➤ What is Artificial Intelligence	10
➤ Goals of AI	10
Types of Artificial Intelligence	11
➤ Machine Learning	11
Artificial Neural Network	11
➤ Big Data	11
Machine Learning	12
Machine Learning Methods	13
Neural Network	14
Types of Neural Network	16
FeedForward Neural Network	16
Recurrent Neural Network	16
Convolutional Neural Network	17
Modular Neural Network	18
Convolutional Neural Network	19
Feasibility Study	25
Feasibility Considerations	26
Requirement Analysis	28
Software Planning and Design	31
Gantt Chart	33
Digit Recognizer Workflow	34
Context Diagram	35
Data Flow Diagram	37
Entity Relationship Diagram	40
Use Case	42
Screen Shots	44
Testing	49
➤ Objectives of Testing	49
> Testing Methods	49
Testing Steps	
I. Unit Testing	50 50

II.	Integration Testing	50
III.	Validation	50
IV.	Output Testing	51
V.	User Acceptance Testing	51
VI.	Loop Testing	51
i.	Simple Loops	52
ii.	Nested Loops	52
iii.	Concatenated Loops	52
Creat	ing Test Data	52
Test Case Design		52
Security Mechanisms		53
Limitations		53
Future Scope and Further Enhancement		54
Conclusion		54
Refer	rence	54