Yashwantrao Chavan Maharashtra Open University, Nashik

School of Computer Science

A PROJECT REPORT

ON

DIGIT RECOGNIZER

Presented and Submitted By

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2015017000355766

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',
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**

Yashwantrao Chavan Maharashtra Open University, Nashik

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

Name of the Guide

Stamp of the Study Center

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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