REPORT

• Handwritten Digit Recognition on MNIST dataset

Submitted To :- Dr. Sagar Pande

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Submitted By :-

Shahnawaj Alam

Roll No :- 66

Section :- KM022

Registration Number :- 11911568

Acknowledgement :-

We would like to express our special thanks of gratitude to my Python teacher “ Mr. Sagar Pande” for their able guidance and support in completing project.

We would also like to thanks google and youtube community to provide free content of education.

Date :-

20/11/2021

Shahnawaj Alam

Abstract / Summary :-

This project is made from Python language. Python is a high level, interpreted and general-purpose programming language. Created by Van Rossum and first released in 1991.

In order to create this project, we have to perform on MNIST database.

1.Set of 70,000 small images of digits handwritten by high school students and

Employees of the US causes Bureau.

2. All images are labeled with the respective digit they represent.

3.MNIST is the hello world of machine learning. Every time a data scientist or machine learning engineer makes a new algorithm for classification, they would always first check its performance

on the MNIST database.

4. There are 70,000 images and each image has 28\*28 = 784 features.

5.Each image is 28\*28 pixels and each feature simply represents one pixel intensity

from 0 to 255. If the intensity is 0, it means is white and if it is 255, it means it is

black.

Requirement :-

• Laptop / Desktop

• Import fetch\_openml

• Import numpy

• Import matplotlib

Project Contribution:-

I have worked very hard to make this project and report.

Result :-

We learnt about how to make AI project using machine learning. We also learnt that if got stuck in error or bugs then just reach out to people or google it you will definitely get some help. Start working on it again.