

Lab Workbook



Faculty Name: **Dr. Neetu Singla**

Student Name: **Piyush Gambhir**

Roll No.: **21CSU349**

Semester: **VI**

Group: **AIML-B (A3)**

Department of Computer Science and
EngineeringThe NorthCap University

Gurugram- 122017, India

Session 2023-24

INDEX

S.No.	TITLE	
1	To explore the basic features of TensorFlow and Keras Package.	
2	To build an ANN model to convert temperature in degree Celsius to Fahrenheit	
3	To build an ANN model for regression problem or house predication dataset.	
4	To build an ANN model for classification problem on diabetes classification to see the effect of: a. Early Stopping b. Dropouts	
5	To build an advance ANN classification model for chur modelling data with: a. Cross Validation b. Grid Search c. Checkpoint	
6	To perform Convolutional Neural Networks for Image Classification on MNSIT Dataset	
7	To create CNN model with dataset containing images of cats and dogs for image classification	
8	To build an image classifier with Keras and Convolutional Neural Networks for the Fashion MNIST dataset.	
9	To train a CNN model to classify images from the CIFAR-10 dataset.	
10	To implement transfer learning using the pre-trained model (VGG16) on image dataset.	

GitHub Repository Link:

[ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects \(github.com\)](https://github.com/piyush-gambhir/ncu-lab-manual-and-end-semester-projects)

Experiment No: 1

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 1/Experiment 1.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s):

To explore the basic features of TensorFlow and Keras Package.

Experiment No: 2

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 2/Experiment 2.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s): To build an ANN model to convert temperature in degree Celsius to Fahrenheit
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Experiment No: 3

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 3/Experiment 3.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s): To build an ANN model for regression problem for house price predication dataset
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Experiment No: 4

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 4/Experiment 4.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s):

To build an ANN model for classification problem on diabetes classification to see the effect of:

- a. Early Stopping
- b. Dropouts

Experiment No: 5

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 5/Experiment 5.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s):

Experiment No: 6

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 6/Experiment 6.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s):

Experiment No: 7

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s): To create CNN model with dataset containing images of cats and dogs for image classification
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Experiment No: 8

Student Name and Roll Number: Piyush Gambhir – 21CSU349

Semester /Section: 6th Semester – AIML-B (A3)

Link to Code: [ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 7/Experiment 7.ipynb](https://github.com/piyush-gambhir/ncu-lab-manual-and-end-semester-projects) at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)

Date:

Faculty Signature:

Marks:

Objective(s):

To build an image classifier with Keras and Convolutional Neural Networks for the Fashion MNIST dataset.

Experiment No: 9

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 9/Experiment 9.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s):

Experiment No: 10

Student Name and Roll Number: Piyush Gambhir – 21CSU349
Semester /Section: 6 th Semester – AIML-B (A3)
Link to Code: ncu-lab-manual-and-end-semester-projects/NCU-CSL312 - DL - Lab Manual/Experiment 10/Experiment 10.ipynb at main · piyush-gambhir/ncu-lab-manual-and-end-semester-projects (github.com)
Date:
Faculty Signature:
Marks:

Objective(s): To implement transfer learning using the pre-trained model (VGG16) on image dataset.
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