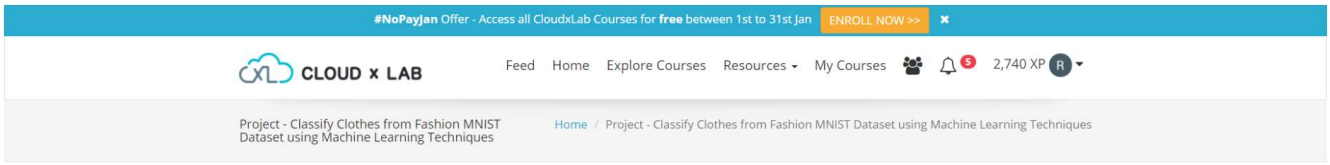
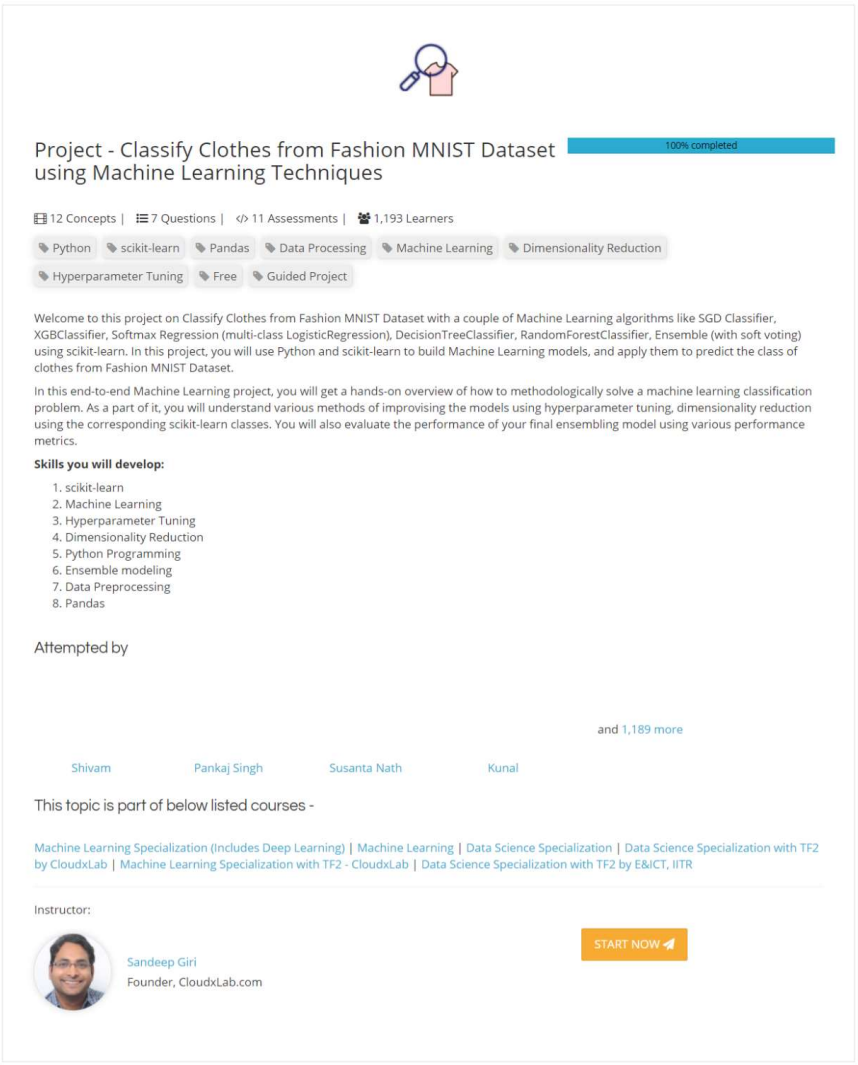
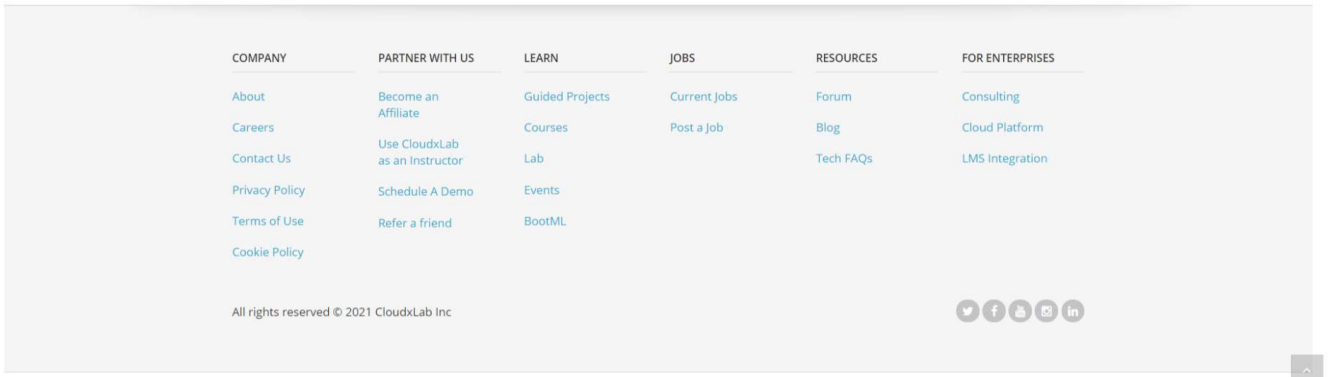
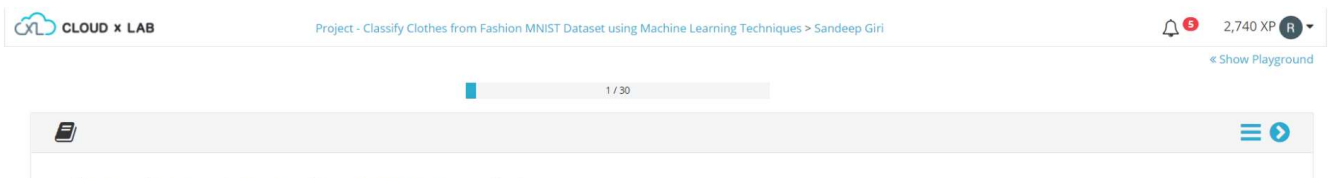

#NoPayJan Offer - Access all CloudxLab Courses for free between 1st to 31st Jan
ENROLL NOW >>
CLOUD x LAB
Feed
Home
Explore Courses
Resources
My Courses
2,740 XP
Project - Classify Clothes from Fashion MNIST Dataset using Machine Learning Techniques
Home / Project - Classify Clothes from Fashion MNIST Dataset using Machine Learning Techniques


Project - Classify Clothes from Fashion MNIST Dataset using Machine Learning Techniques
100% completed
12 Concepts | 7 Questions | 11 Assessments | 1,193 Learners
Python
scikit-learn
Pandas
Data Processing
Machine Learning
Dimensionality Reduction
Hyperparameter Tuning
Free
Guided Project
Welcome to this project on Classify Clothes from Fashion MNIST Dataset with a couple of Machine Learning algorithms like SGD Classifier, XGBClassifier, Softmax Regression (multi-class LogisticRegression), DecisionTreeClassifier, RandomForestClassifier, Ensemble (with soft voting) using scikit-learn. In this project, you will use Python and scikit-learn to build Machine Learning models, and apply them to predict the class of clothes from Fashion MNIST Dataset.
In this end-to-end Machine Learning project, you will get a hands-on overview of how to methodologically solve a machine learning classification problem. As a part of it, you will understand various methods of improvising the models using hyperparameter tuning, dimensionality reduction using the corresponding scikit-learn classes. You will also evaluate the performance of your final ensembling model using various performance metrics.
Skills you will develop:
1. scikit-learn
2. Machine Learning
3. Hyperparameter Tuning
4. Dimensionality Reduction
5. Python Programming
6. Ensemble modeling
7. Data Preprocessing
8. Pandas
Attempted by
and 1,189 more
Shivam
Pankaj Singh
Susanta Nath
Kunal
This topic is part of below listed courses -
Machine Learning Specialization (Includes Deep Learning) | Machine Learning | Data Science Specialization | Data Science Specialization with TF2 by CloudxLab | Machine Learning Specialization with TF2 - CloudxLab | Data Science Specialization with TF2 by E&ICT, IITR
Instructor:
Sandeep Giri
Founder, CloudxLab.com
START NOW


COMPANY
About
Careers
Contact Us
Privacy Policy
Terms of Use
Cookie Policy
PARTNER WITH US
Become an Affiliate
Use CloudxLab as an Instructor
Schedule A Demo
Refer a friend
LEARN
Guided Projects
Courses
Lab
Events
BootML
JOBS
Current Jobs
Post a Job
RESOURCES
Forum
Blog
Tech FAQs
FOR ENTERPRISES
Consulting
Cloud Platform
LMS Integration
All rights reserved © 2021 CloudxLab Inc


CLOUD x LAB
Project - Classify Clothes from Fashion MNIST Dataset using Machine Learning Techniques > Sandeep Giri
5
2,740 XP
R
« Show Playground
1 / 30

End to End ML Project - Fashion MNIST - Description

Objective

Fashion-MNIST is a dataset of Zalando's article images —consisting of a training set of 60,000 examples and a test set of 10,000 examples. Each example is a 28x28 grayscale image, associated with a label.

The objective of the project is - to use Fashion-MNIST data set to identify (predict) different fashion products(articles) from the given images using Machine Learning.

We will be following the below steps to solve this problem:

1. Importing the libraries
2. Using some pre-defined utility functions
3. Loading the data
4. Cleaning the data
5. Dividing the dataset into training and test dataset using train_test_split in the ratio 85:15
6. Training several models and analyzing their performance to select a model
7. Use dimensionality reduction to improve the 'training', 'fine-tuning' and 'prediction' time.
8. Fine-tuning the model by finding the best hyper-parameters and features
9. Evaluating selected model using test dataset

Acknowledgements

Cloudxlab is using this "Fashion MNIST" problem for its machine learning learners for learning and practicing. Fashion-MNIST dataset is a collection of fashion article's images provided by Zalando . We thank Zalando Research for hosting the dataset.

Mark as Completed

Request Certificate

Index Next

15 Comments

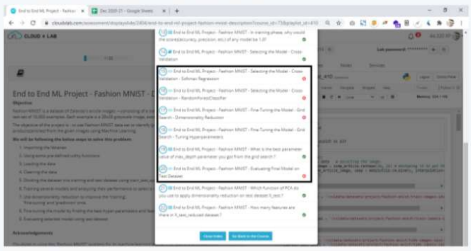
Unfollow conversation

Add comment

Sakti Prasad Pattanayak 3 days ago

Dear Sir,

After reviewing several times, couldn;t run the code.



Upvote Reply Share

Rajtilak Bhattacharjee 3 days ago

Hi,

Please schedule a meeting with me sometime tomorrow from the below link:

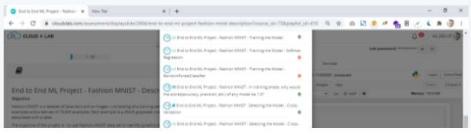
https://rajtilak.youcanbook.me/

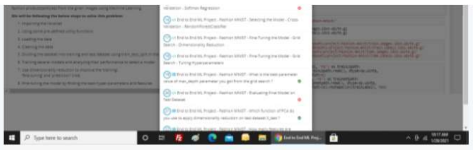
You will receive an invite with a Hangout link. Let's meet over Hangout and discuss this problem.

Thanks.

Upvote Reply Share

Sakti Prasad Pattanayak 3 days ago





Dear Sir,

There are few things couldn't fix kindly check the error sign.

Upvote Reply Share

Rajtilak Bhattacharjee 3 days ago

Hi,

Please start from step 1, check the answer, match it against your code, make any changes if necessary, and then move to the next step to repeat the same process.

Thanks.

Upvote Reply Share

Abhishek Gaurav 4 months ago

i have completed project - Fashion MNIST but when my page is not openning by default. It is showing another page "project_fashion_mnist_410". Pls suggest and send my file location.

Upvote Reply Share

Abhishek Gaurav 4 months ago

where is saved my project - Fashion MNIST?

Upvote Reply Share

Sandeep Akode 4 months ago

It should be in ~/cloudxlab_jupyter_notebooks/Python.ipynb

Upvote Reply Share

Neeta Sahay 5 months ago

Hi ,

my lab subscription has expired. How to proceed with the course ?

Upvote Reply Share

Himanshu Rathod 5 months ago

Hi,

You can buy Lab Subscription separately here - https://cloudxlab.com/lab/

Thanks,

Upvote Reply Share

Cyril George 6 months ago

i cant find the data. how to download the dataset from which git repository?

Upvote Reply Share

Rajtilak Bhattacharjee 6 months ago

Hi,

You do not need to worry, as you move ahead in this project, we will show you how to access the data and from where.

Thanks.

Upvote Reply Share

Vivek Bohra 8 months ago

Hi,
To do this project, I wanted to open a new notebook on right side window. But I am not getting any option. Whenever I open a file or create new one, Jupiter always open in new tab of browser.
Please guide how to open in right pan along with the actions defined so that I can easily submit the solution for verification and mark completed.
Thanks,
Vivek

Upvote Reply Share

CloudxLab 8 months ago

Hi,

The notebooks on the right side are default notebooks and cannot be replaced as they are used by the assessment engine. What you can do is to save the existing notebook by going to File -> Download as -> .ipynb format and save it with some other name, then delete the content of the default notebook and start afresh.

Thanks.

-- Rajtilak Bhattacharjee

Upvote Reply Share

Avishek Desarkar 10 months ago

i cant find the data set pls resolve ASAP, how to download the dataset from which git repository

Upvote Reply Share

CloudxLab 10 months ago

Hi @avishekdesarkar:disqus ,

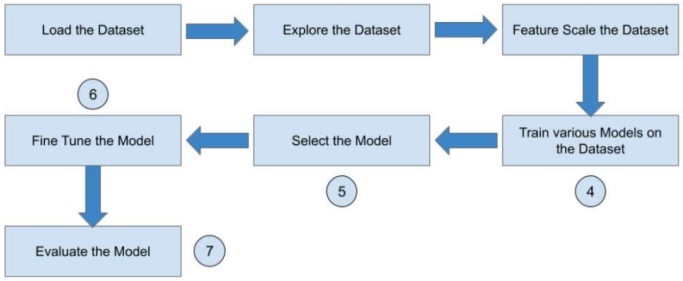
Can you please follow the next steps?

Upvote Reply Share

End to End ML Project - Fashion MNIST - Step 1 - Load the Dataset

First, we will load the Fashion MNIST dataset.

1 2 3



Mark as Completed

Request Certificate

Previous Index Next

Be the first one to comment!

Add comment

More Pages