Rishit Toteja

Mail : totejarishit262@gmail.com
LinkedIn : LinkedIn
GitHub : GitHub
Medium : Medium

Deep Learning and Data Science Specialization | TensorFlow Developer | Python Developer

PROJECTS

1) COVID-19 Prediction using Chest X-ray Scans in Keras with CNNs (Project - GitHub) :

1) Built and trained a **convolutional neural network** in **Keras** with **TensorFlow** backend using **OpenCV** from scratch to predict patients if they were infected with COVID-19 or not using their chest X-ray images.
2) Model used was **Sequential** with a combination of **Convolutional layers**, **Pooling layers**, **Dropout layers**, **Dense** layers with **relu** activation and output layer with **sigmoid** activation.
3) Training Set Accuracy : 97.38 % ; Validation Set Accuracy : 97.79 % ; Test Set Accuracy : 98.14 %

2) Stock Price Forecasting Model in TensorFlow using LSTM (Project - GitHub) :

1) Made a Stock Price Prediction **Deep Learning Model**, using **TensorFlow** in **Python.**
2) Used **numpy** and **sklearn** for data preprocessing and train-test split.
3) Built and trained a **Stacked LSTM** model in TensorFlow using **Tensorflow Sequential API.**
4) Used **LRScheduler Callback** for customizing the Model.

3) Cervical Cancer Prediction Using Machine Learning (Project - GitHub) :

1) Built and trained an **XG-Boost classifier** to predict whether a person has a risk of having cervical cancer using **sklearn** in **python**.
2) Performed EDA and Data Visualization in python using **matplotlib** and **seaborn**.
3) Training Set Accuracy : 99.562 % ; Test Set Accuracy : 95.348 %

4) Machine Learning Web Application Using Streamlit in Python (Project - GitHub) :

1) Worked on making an **Machine Learning Web Application** using **Streamlit** in Python
2) Users can choose a classification algorithm, interactively set **hyper-parameters** values like **regularization** and **normalization** parameters.
3) Users would also be able to view the scores (Accuracy Score, **Precision** Score, **Recall** Score and **F1 Score**) and plot **Confusion Matrix** and **ROC - Curve**.

EDUCATION

Delhi Technological University, New Delhi — B. Tech

Electrical Engineering **CGPA - 9.55** (Aggregate)

Sardar Patel Vidyalaya, New Delhi :

Class XII (2020) - **93 %** (CBSE BOARD)

EXPERIENCE

Artificial and Machine Learning Society (AIMS-DTU), Computer Vision Specialist

PRESENT

1) Working on **implementing** Ian Goodfellow research paper on **Generative Adversarial Networks (GAN's) -Ian Goodfellow et al. (2014)** in **PyTorch.**
2) Used **OpenCV** and built a CNN in **TensorFlow** for predicting the age and gender of a given image.
3) Implemented a **Neural Style Transfer** model in **PyTorch**.
4) Built a **Generative Adversarial Network** in **PyTorch**.
5) Used **OpenCV** and **PyTorch** for making an **Image Captioning** Deep Learning Model.

ACHIEVEMENTS

1) **Hackerrank (Account)**: **5 star** rating in **Python Programming**, **5 star** rating in **Problem Solving**
2) **IBM Certified Badge (Badge) : Applied Data Science with Python**

SKILLS

1) **Python (Expert)**
2) **C++/ C**
3) **MATLAB and Simulink**
4) **SQL (Relational Database)**

TOOLS AND FRAMEWORKS

1) **TensorFlow**
2) **Keras**
3) **PyTorch**
4) **OpenCV**
5) **Sci-kit learn**
6) **Pandas, numpy, matplotlib, Seaborn**
7) **NLTK, NetworkX**
8) **MySQL**

COURSEWORK

1) Deep Learning
2) Computer Vision
3) Machine Learning
4) Anomaly Detection
5) Natural Language Processing
6) Data Science
7) Databases

CERTIFICATIONS

1) **Deep Learning Specialization (Deeplearning.ai) (Link)**
2) **TensorFlow Developer Professional Certificate (Deeplearning.ai) (Link)**
3) **Machine Learning (Stanford University) (Link)**
4) **Applied Data Science Specialization (University of Michigan) (Link)**
5) **Python 3 Programming (University of Michigan) (Link)**