Project 1: Web-scraping the COVID data and creating a simple flask app with forecasting.

Mentor:

- Ideas taught:
  1. Web scraping using beautifulsoup
  2. data analysis and visualization
  3. Forecasting algorithms
  4. Flask web app
- Required skills: Some
- Data Source:
  1. https://www.worldometers.info/coronavirus/,
  2. https://raw.githubusercontent.com/CSSEGISandData/COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/time_series_covid19_confirmed_global.csv,
  3. https://raw.githubusercontent.com/CSSEGISandData/COVID-19/master/csse_covid_19_data/csse_covid_19_time_series/time_series_covid19_deaths_global.csv
  4. https://www.worldometers.info/coronavirus/country/nepal/
  5. https://coronanepal.live/

Project 2: "Sentiment Analysis : An Analysis of Deep Learning Models":

In this project the idea is to implement Sentiment Analysis models using LSTM, GRU and also CNN and compare accuracies.

Data source:

- https://www.kaggle.com/lakshmi25npathi/imdb-dataset-of-50k-movie-reviews,
- https://nlp.stanford.edu/projects/glove/

Project 3: Face detection for masks

We create a deep learning system using OpenCV and Keras/PyTorch/Tensorflow to determine if masks are worn or not.

Data and Code Source:

Reference article: https://www.pyimagesearch.com/2020/05/04/covid-19-face-mask-detector-with-opencv-keras-tensorflow-and-deep-learning/

Project 4: Detect pneumonia using X-ray images

Mentor:

In this project, we will try to detect pneumonia on medical X-ray images. Basically, this is an image classification project.

Data Source

- https://www.kaggle.com/paultimothymooney/chest-xray-pneumonia

  This dataset consists of X-ray images with with out Pneumonia and with Pneumonia

Project 5: Beginners project with Titanic dataset from Kaggle (for novice)

Mentor:

Project 6: Beginners project with hand-written character recognition (for novice)

Mentor:

Project 7: Stock price forecasting

Project 8: A project on Anomaly detection, dataset from Kaggle