Gvs Goutham

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EDUCATION

- **Illinois Institute of Technology,** Chicago, IL **Expected May, 2021 , GPA: 3.66**
  Masters in Computer Science (Specialization in Data Analytics, Data Science, Computational Intelligence)
  Focused Coursework: Intro to AI, Data Preparation and Analysis, Machine Learning, Python, R, SQL, Design and Analysis of Algorithms, Advance Database Organization, Software Project Management, Image Classification using Deep Learning.
- **Mahatma Gandhi Institute of Technology,** Hyderabad**,** IND **Aug,2014 - April,2018, GPA: 3.5**
  Bachelor of Technology in Computer Science and Engineering

EXPERIENCE

Predictive Analyst – ANZ, Virtual Internship **May,2020 – June,2020**

- Performed Exploratory Data Analysis on the ANZ 3-month transaction dataset of 100 customers which resemblance the real-time ANZ transactions. Data cleaning, feature engineering , transformations have been applied to the dataset.
- Insights like average transaction amount, monthly number of transactions, maximum amount of transaction, location of the customers, distance between customers and merchants have been analyzed and visualized.
- Build a machine learning model to predict the annual salary of customers(introduced by me) using linear regression model and decision tree model with R-square of the model of 0.30 to 0.67, turns out decision tree model worked well.

Assistant System Engineer - Tata Consultancy Services (TCS), Kolkata, IND **Jul, 2018 - Jul, 2019**

- Worked as production support for CitiBank client based in North America:
- Server Management using an application portal called Database solutions portal (DSP), audit logs, batch job monitoring by accessing the database and host machines.
- Running shell scripts, procedures, and functions on MySQL DB to check if there is any inconsistencies, redundancies in the data which is collected by batch jobs running on 86000 servers all over the world.
- Maintain the production server running at a success rate of 99.999% every week.

TECHNICAL SKILLS

- **Programming languages**: Java, Python **,** R ,C,C#.
- **RDBMS/NOSQL**: MySQL, PostgreSQL, Oracle DB.
- **Knowledge on**: Arduino, Raspberry Pi, shell Scripting.
- **Software Development:** Agile methodology.
- **Web-Technologies**: HTML5, XML, CSS, PHP, JAVASCRIPT
- **Tools**: R-studio, Visual studio, Tableau, Octave, SQL Workbench, Excel, Git, MATLAB, Informatica/Power BI(ETL).
- **Packages/Frameworks**: Keras, TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, ggplot, caret, dplyr.

PROJECTS

Facial Recognition Security System: **Summer, 2017**

- A Facial Recognition security system build using Microsoft Face API on Raspberry Pi 3 and deployed on the Azure cloud.
- The built model has an accuracy of 95% success rate as it is using Machine Learning in facial recognition considering 64 segments on the face to recognize the face.

Predict Homicide Rate using Socio-economic Indicators: **Spring, 2020**

- Predicting Homicide Rates for 88 countries(Asian, Europe) in the world based on their local best socio-economic indicators.
- Model built using 4 different modeling techniques which are K-nearest neighbors, Artificial Neural Networks, Lasso, Linear Regression.
- Dealt with Data collection, cleaning, exploratory data analysis, and final predictive analysis on the model with minimal error rate(RMSE-Root Mean Square Error) of 0.19 to 4.2(for all the modeling techniques) and hyperparameters like 10-fold cross validations are used to evaluate model performances.

Image Classification using KNN, Feedforward Neural Network, CNNs: **Summer, 2020**

- Worked on predicting image class on CIFAR-10 dataset via Kaggle platform with an accuracy of 35.4%,this has been improved to 60% by feedforward neural networks model.
- The above model is then worked with CNN increasing the accuracy to 75%, In this process understood the value of GPU.

Stock Price Prediction for a company: **Summer, 2020**

- Data of 6 years for a company collected using pandas_datareader package. It contains information like for particular date what was open stock price, closing stock price , high, low. Data is cleaned, scaled for training the model.
- Built a LSTM(Long short term memory) neural network model using PyTorch, keras package to predict the stock price for a particular date in future or past having hyper parameters like 80:20 data split, 10-fold cross validation, RMSE as metric.
- The model has an error rate of 5.34 on the test dataset which is pretty good performance.

Deep Learning using PyTorch:

- Participating in a 6-week deep learning course using PyTorch via jovian.ml platform which involved course project retinopathy blindness detection(60% on Leaderboard), protein classification Kaggle competition top 30%.