Harshit Agarwal

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Education

Gujarat Technological University, Ahmedabad

Bachelor of Engineering in Computer Engineering, August 2020 CGPA: 8.33/10 (Up to Semester: 7)

Lancers Army School, Surat

Science (12th Grade), May 2016 Percentage: 92%

Skills

Programming Languages: **Python, Java,** C++, C

Machine Learning: TensorFlow, Keras, Scikit Learn, Matplotlib, OpenCV, Pandas, NLTK, Neural Networks

Web Technology: **HTML5**, **CSS3**, **JavaScript**, **PHP**, **Flask**

Database: Oracle SQL, MySQL

Experience

Undergraduate Research Assistant Sarvajanik College of Engineering and Technology, Gujarat, India Jan, 2020 – May, 2020

 Assisting in the research project related to Music Analysis and Generation using GAN under Prof. (Dr.) Keyur Rana.

Data Science Intern Krupa Diam., Maharashtra, India, May 2019 – June 2019

- Team member for building predictive model for company's sales, inventories and budgetary
- This system helps management to study and analyse their sales trend prediction and based on that their inventory can be managed

Achievements & Leadership

- Winner of State Level Dance Competition, "Flash Mob", Surat, 2017
- Volunteer at Disha NGO which is engaged in helping Autistic and other special children, Surat, 2016

Publications

- Harshit Agarwal, Gaurav Jariwala and Vraj Jadhav, "Sentimental Analysis of News Headlines for Stock Market", IEEE International Conference for Innovation in Technology 2020, accepted for publication.
- Harshit Agarwal and Gaurav Jariwala," A Neural Network Based Approach for Operating System", Innovative Data Communication Technologies and Application (ICIDCA 2019), Lecture Notes on Data Engineering and Communications Technologies, vol. 46, pp 594-599, Springer, Cham.
- Harshit Agarwal, Gaurav Jariwala and Akshit Shah," Analysis and Prediction of Stock Market Trends using Deep Learning", Proceedings of First International Conference on Computing, Communications, and Cyber-Security (IC4S 2019). Lecture Notes in Networks and Systems, vol 121, pp 521-531, Springer, Singapore
- Harshit Agarwal and Gaurav Jariwala," Analysis of Process Scheduling Using Neural Net In Operating System", Inventive Communication and Computational Technologies [ICICCT 2019], Lecture Notes in Networks and Systems, vol. 89, pp 1003-1014, Springer, Singapore.

Projects

Analysis and Prediction of Stock Market Trends, 2019-2020

- Achieved around 93% accuracy by using Recurrent Neural Network for predicting the values of open, close, high and low of a particular stock.
- Support Vector Machine and Naïve Bayes was used for the sentimental analysis of news headlines to predict the trend of stock price.
- Used K-Means clustering to make groups of similar stocks.

Fake News Detector, 2020

- Fake news is detected from article's text, headline and subject, using Recurrent Neural Network, Bidirectional RNN, 1D- Convolution Neural Network and 1D-CNN-LSTM.
- Ensemble method is used to integrate all the model to improve accuracy up to 99%.

Breast Cancer Detect, 2020

- Artificial Neural Network is used for predicting whether the breast mass present is cancerous or not based on this quality and measurement. Accuracy of 95% percent is achieved.
- Webapp was made using Flask and deployed on Heroku.

An Image classifier for TB detection using X-ray Scan, 2019

- Convolution Neural Network is used to detect TB in patients using X-ray. The user needs to upload their chest X-ray and the system gives them probability of them having TB.
- The system was trained and tested on two publicly available datasets: Sbenzhen chest X-ray set and Montgomery Country chest X-ray set (MC). Accuracy of 85 percent was achieved.