Purvi Verma

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Leetcode: https://leetcode.com/20ce01050/

EDUCATION

Indian Institute of Technology, Bhubaneshwar — Orissa, India
Bachelor of Technology - Civil Enginnering; CGPA: 8.13 — 2020 - Now

Chameli Devi Public School — Indore, India
Class XII; Percentage: 92.2 — 2020

Chameli Devi Public School — Indore, India
Class X; Percentage: 91.6 — 2018

SKILLS SUMMARY

- **Languages**: C, C++, Python, HTML, CSS, Mysql, Julia
- **Miscellaneous**: AutoCAD, LTSpice
- **Soft Skills**: Leadership, Event Management, Writing, Public Speaking, Time Management

RESEARCH EXPERIENCE

Developing a Stimulation on Energy Harvesting by Piezoelectric Material using Julia

April 2022 - Present

Supervisor: Dr. Mohammad Masiur. Rahaman, IIT Bhubaneswar

Physical experiments using piezoelectric transducers are performed to demonstrate how they may be utilised to convert mechanical strain and vibration energy into electrical energy.
Understanding of gridap library.
Creating a stimulation on Julia for the experiment and verifying the outcome.

Detecting hate speech directed towards women with focus on minimising the bias

September 2022 - Present

Supervisor(s): Dr. Kisor Kumar Sahu, IIT Bhubaneswar; Dr. Shweta Jain, IIT Ropar; Dr. Rajesh Sharma, Unitersity of Tartu

Extracting tweets from twitter using a web scraper.
Framing annotation guidelines which makes the process as objective as possible.
Focus on developing new models and using known models to train them using the extracted data set and verifying how well these models work on new data.

PROJECTS

- **Predicting if a message is spam or not**: Used multinomial Naive Bayes classifier model with smoothing alpha=0.1 and compute the area under the curve (AUC) score using the transformed test data and then fitted a Logistic Regression model with regularization C=100.Also finding the 10 smallest and 10 largest coefficients from the model and return them along with the AUC score in a tuple.

  https://github.com/purvi1508/-Predicting-if-a-message-is-spam-or-not

- **Sentiment-Analysis**: By using Natural Language Processing I have analyzed emotions and sentiments of text.
  https://github.com/purvi1508/Sentiment-Analysis

- **Neural-Network-Application**: The random dataset has been downloaded from kaggle having labels output and target. Using dnn algorithm Predicted output values are plotted against the true output value.
  https://github.com/purvi1508/Neural-Network-Applicatin

- **Case Study on Crime Against Women**: I got a hold of a dataset (from Kaggle) It has state-wise and district level data on the various crimes committed against women between 2001 to 2014. I have used three major libraries: numpy, pandas, matplotlib, the linear regression model to predict the cases in furthur years.
  https://github.com/purvi1508/Case-Study-on-Crime-Against-Women

ACADEMIC COURSES

- Mathematics - I II (covers Linear Algebra, Multivariate Calculus, Complex Analysis); Combinatorics, Probability and Statistics
- Introduction to Programming and Data Structures,
- Introduction to Machine Learning for Engineers
- Digital Logic and Systems

Academic Achievements

- Qualified Coursera's Data Science coding competition

Position of Responsibility

- Governor of Social Welfare Society Souls for Solace at IIT BBS.

Extra-Curricular Achievements

- Won first place in the Emotional Damage competition held at the General Championship at IIT BBS.
- Won first place in the Junk Art competition held at the General Championship at IIT BBS.
- I was the Goalkeeper of the team winning first place in the Football tournament held at the General Championship at IIT BBS.
- Won third place in the Astrothink competition held at the General Championship at IIT BBS.