VISHAL VANPARIYA

Scaling new heights of success and leaving a mark of excellence in assignments which involve analytical capabilities and professional growth in **Computer Vision/ Deep Learning/ Machine Learning, NLP (Natural Language Processing)**, preferably in **Bengaluru, Hyderabad & Pune**

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https://github.com/vishalvanpariya

PROFILE SUMMARY

- Creative & results-driven **B.E. (Information Technology)** professional with **over 2 years** of experience
- Keen interest in applying the knowledge of Machine Learning based tools that automate certain processes within the company, performing statistical analysis and applying data mining techniques
- Proficient with Python, SQL, AWS-EC2, TensorFlow, JavaScript, Java, PHP and Software Development for Windows
- Gained knowledge in manipulating and analysing complex, high-volume, high-dimensionality data from varying data sources
- Rich understanding of Machine Learning algorithms and statistical analysis
- Skilled in gathering inputs from users and leveraging given data for creating reliable algorithms that predict future behaviour
- Exposure of NLP or text data including test analysis, text data pre-processing
- Possess strong technical and analytical skills with excellent communication, interpersonal, problem-solving, decision-making and leadership skills

EDUCATION

2019: B.E. (Information Technology) from Government Engineering College, Bhavnagar

2015: H.S.C. from The Imperial Science School, Dhoraji

2012: S.S.C. from Patel Vidya Mandir, Dhoraji

TECHNICAL SKILLS

Python
SQL
AWS-EC2
TensorFlow
JavaScript
Java
PHP
HTML
CSS
Pandas
Keras
Firebase
Flask
GCP
Scikitlearn
NLTK
NoSQl
Numpy
Json

PERSONAL DETAILS

Date of Birth: 17th August 1998
Languages Known: English, Hindi and Gujarati

CORE COMPETENCIES

- Machine Learning Algorithms
- Predictive Modelling
- Requirements Gathering & Analysis
- Information Quality Assurance
- Project Execution
- Solution/ Code Optimization
- Exploratory Data Analysis
- Probability and Statistics
- Data Preprocession and Learning
- Research & Evaluation
- Process Optimization
- NLP (Natural Language Processing)
- Test Analysis
- Test Data Pre-processing
- Cross-functional Coordination

SOFT SKILLS

Communication	Team Leadership	Decision Maker
Avid Learner	Interpersonal Skills	Problem Solver

WORK EXPERIENCE

Jul'19-Till Date: Rtbdemand, Bengaluru as Software Engineer (*Tools: AWS-EC2, MySQL)*

Key Result Areas:

- Determining project readiness for all major releases and providing vendor with necessary documentation, test cases & plans
- Engaged in API integration - front end and backend both

- Creating as well as designing a database
- Managing AWS-EC2 servers
- Working on Android game development
- Steering webscraping using python
- Participating in design discussions and code reviews; integrating and validating new product designs
- Designing, developing, debugging and modifying software as per the clients' specifications
- Evaluating requirements and determining those that need a software component
- Preparing detailed reports concerning project specifications and activities
- Undertaking software design & development, design of software test routines, design verification, functional testing, unit testing and peer code reviews
- Managing complete back-end process with Automatic SMS features and Lead Generation flow
- Developing chrome extension models for Automatic QC, AMP Chatbot for faster loading and writing MySQL statements/ queries

PROJECT/ COMPETITION

Mechanisms of Action (HealthCare - Deep Learning Case Study)

- **Objective**: **Label multiple drugs** through given human cells and genes data
- **Analysis**: Performed **Univariate Analysis** and **Multi-variate Analysis**
- **Featurizations**: Extracted new data using **sum, mean, median, standard-deviation, kurtosis, skewness, IQR**
- **Models Built**: Built 2 simple **neural networks and TabNet (combination of tree and NN)**
- **Result:** Used **log loss** for each of the labels; final submission standing was at **373th position out of 4373**
- **Use Case:** It is domain specific project even it is only working for those drugs which are given in train data so its use is limited but for more drugsthe same approach can be used
- **GitHub:** https://github.com/vishalvanpariya/MOA---Kaggle

CERTIFICATION

Certified in Applied Machine Learning Course (www.appliedaicourse.com), Sep'21

Projects Undertaken:

Project 1: Unintended Bias Toxic Comment Classification (NLP – ML/DL Case Study)

- **Objective:** Implement Machine Learning or Deep Learning Model that allows social media platforms to automatically detect toxic comments and take appropriate actions
- **Analysis:** Performed Univariate Analysis on data columns & target variables and plotted Word-Clouds for the training text
- **Featurization:** Tried to add new features like number of words, comment length, number of special charts and so on; applied T-test for co-relation between categorical features and Pearson Correlation for continuous features
- **Models Built:** Used Logistic Regression, Decision Tree, XGBoost, and Random Forest ML algorithms and 2 different neural networks were tried with LSTM, attention mechanism, and pooling layers; finally used State-of-the-art model BERT with fine-tuning
- **Results:** Performance metrics used here are F1-Score with AUC; AUC is used for deciding the best threshold; Kaggle completion final standing at 632nd rank out of 3116
- **Use Cases:** The model can be very useful for social media platforms; it can use any platform where people can write anything
- **Deployment:** Model deployment is done using Flask Framework in Google Cloud platform
- **Blog:** https://medium.com/@vanpariyavishal02/toxicity-of-the-comment-by-jigsaw-1faea0e716b3
- **GitHub:** https://github.com/vishalvanpariya/Toxic-comment-classification

Project 2: Robotic Grasp Detection (Computer Vision - Deep Learning Case Study)

- **Objective:** Detect Robotic Grasp for given objects
- **Analysis:** Performed EDA on given image data and positive and negative bounding boxes
- **Featurizations:** Rotated image randomly between 0 to 360 degrees and applied random translation on image and generated 500 images for each image
- **Models Built**: Used RESNET50 model with fully connected and dropout layers and tried with double RESNET50 for RGB Image and Depth Image and the third model was EfficientNet
- **Results:** Performance metric used with a combination of two different metrics including one as the intersection of union, second metric was used for the orientation of the bounding box; final accuracy was 89.4%
- **Use Cases:** This model is very useful for any robot industry to grasp objects
- **Deployment:** Model deployment done using Flask Framework in Google Cloud platform
- **Blog:** https://medium.com/@vanpariyavishal02/robotic-grasp-detection-resnet-efficientnet5ed9ec6a8886
- **GitHub:** https://github.com/vishalvanpariya/Robotic-Grasp-Detection