HALANI VRUTIK DIPAKKUMAR

Course : **B.E. (Hons.)**, Computer Science, 2021
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CGPA : 8.61

ACADEMIC DETAILS

COURSE	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	SCORE	YEAR
CLASS XII	H.B. Kapadia New High School , Memnagar	GSEB	88 %	2017
CLASS X	H.B.Kapadia New High School , Memnagar	GSEB	93.17 %	2015

Subjects / Electives	Data Mining, Data Structures and Algorithms, Machine Learning, Artificial Intelligence, Information Retreival, Discrete Structures for Computer Science, Computer Programming, Database Systems, Object Oriented Programming, Probability and Statistics, Logic in Computer Science, Differential Equations, Calculus, Digital Design, Microprocessors and Interfacing, Linear Algebra, Principle of Economics
Technical Proficiency	Data Mining, Cluster Analysis, Algorithms, Competitive Programming, Data Structures, C++ Language, C Programming, Python, Object-Oriented Programming (OOP), Database Systems, Java, Django, Software Development, JavaServer Pages (JSP), Web Development, PostgreSQL, Java Database Connectivity (JDBC), Java Applets, HTML + CSS, SQL*Plus, Github, JavaScript, Node.js

SUMMER INTERNSHIP / WORK EXPERIENCE

SDE Intern, Microsoft   Apr 2020 - Present
- I work in R&D department of Azure CosmosDB.
- Technologies used : C++ , Azure

Project Intern, Infibeam Avenues   May 2019 - Jul 2019
- Investment Chatbot for Tax-Benefit - Artificial Intelligence , Web Development
- Technology Used : Python , Django , Webhook , PostgreSQL , Dialogflow
- The project is an initiative to create and efficient , time consuming and hassle-free method to fill an investment form.
- I was responsible for designing the flowchart , database , maintaining dynamic responses via webhook , developing django files and testing.

PROJECTS

Building Fischer Discriminant Analysis and Logistic Regression from Scratch - Machine Learning   Apr 2020 - Apr 2020
- Implementing the Fischer's LDA for classification and logistic regression for classification from scratch without using any libraries.
- I worked on implementing generalised Fischer's LDA which works on any data file given.

Neural Network from Scratch - Machine Learning   Apr 2020 - Apr 2020
- I made a class of Neural Network which is implemented from scratch without using any high level libraries in python . It functions same as any neural network in keras.
- It provides functionality of adding any number of layers with any activation function and train and test your model.
- I was involved in implementing feedForward and Back-propagation.

ConnexionAI - Web Development and Machine-Learning   Oct 2019 - Oct 2019
ConnexionAI is the project I created working with my team at HackHarvard in Harvard University . It is the web-app we created along with the machine learning model that converts American Sign Language to Text and Speech in required Language and Text and Speech in any language to American Sign Language. I worked on the backend part and machine learning model.

Noted - Web Development and Machine-Learning   Oct 2019 - Oct 2019
Noted is a webapp that takes an image of your hand-written notes and converts to text and extracts the topic being talked about. Then it gives you more information about the topic from internet also it gives you the links to study from such as google , wikipedia , youtube etc. It also makes flash cards from the notes you provide and the quiz for your preparation. I worked on the front-end part and the part of connecting the front-end and back-end. This was created as a project in Hackathon at Yale University in the hackathon.

Music Lyrics Search Engine - Information Retrieval   Sep 2019 - Sep 2019
- Music lyrics search engine to retrieve songs with given lyrics implemented in python using Cosine Similarity with some changes to increase accuracy of the model.
- I worked on making GUI of the application in Tkintter and writing algorithm from scratch.

Deep Fashion - Artificial Intelligence   Sep 2019 - Sep 2019
- Deep Fashion app created using PYTHON
- This app is created for cloth suggestion. It take input image , get tags of various clothing items in the photo and suggests top-5 best matching apparels.
- I was responsible for implementing Object Detection and tag Generation of the image and label the image.

Anomaly Mining in Community Detection - Data Mining   May 2019 - Present
- The aim of the project is to detect the outliers (anomaly) in the communities formed every year in the dynamically increasing sized database of authors and their research papers.

- Learning Aspects : Stochastic Block Model , Anomaly Detection , Data Mining.
- I am currently working on this project .

Naive Bayes and KNN algorithm in data mining - Data Mining
Apr 2019 - Apr 2019
- Naive Bayes and KNN algorithm in data mining implemented using python
- I was responsible for designing KNN algorithm for given database.

Data Mining Apriori Algorithm in Python and FP-Tree implementation in Java - Data Mining
Mar 2019 - Mar 2019
- Apriori Algorithm in data mining implemented in python and FP-Tree in java
- I was responsible for making apriori algorithm and dataset pruning

GoogleBooks APi with python - Google API with Python
Mar 2019 - Mar 2019
- A Python GUI to fetch search results from google books api and using cache memory
- Learning aspects : Using cache , Tkinter , Google books api , JSON responses
- The project helps search for books by their descriotion , name or authors name and many more.
- I was responsible for designing the whole project.

Online Music Streaming Platform -Database Systems and Object Oriented Programming - Web Development
Feb 2019 - Apr 2019
- A music website designed as a part of campus project.
- The project provides digital music service and access to many songs.
- It incorporates the concept of Database Normalization to manage data.
- Technology Used : Apache tomcat server , Java , HTML , CSS , JSP , Servlets
- I was responsible for working on backend code of the website and testing and debugging .

Data Mining Clustering - Data Mining
Feb 2019 - Feb 2019
- Divisive , Agglomerative and K-means clustering implemented on larger datasets in python

- I was responsible for designing Agglomerative clustering and K-Means Clustering Algorithm.

DBSCAN and LOF in Data Mining - Data Mining
Jan 2019 - Jan 2019
- DBSCAN and LOF implemented in python in data mining algorithms.
- Learning Aspects : Data Mining Algorithms , MATPLOTLIB , Numpy
- I was responsible for designing DBSCAN and data preprocessing

Hotel Booking Desktop Portal - Software Development
Sep 2018 - Nov 2018
- Created a Hotel Booking Portal using JAVA Swings that enables hotel booking along with waiting list.
- The project provides a platform to book hotel rooms across many cities.
- Technology Used : Java , Swing , SQL
- I was responsible for making backend part of the project and testing.

CERTIFICATIONS

CERTIFICATION	CERTIFYING AUTHORITY	DESCRIPTION
Neural Networks and Deep Learning	Coursera	
Advanced Java Course Certificate	Ananya Education	
Python and Django Full Stack Web Developer Bootcamp	Udemy	
Numpy Stack in Python	Udemy	
Java Course Certificate	Ananya Education	
Python And Advanced Python Course Certificate	Ananya Education	
Della Bungee Jumping Certificate	Della Adventure	
C and C++ course Certificate	Ananya Education	

AWARDS AND RECOGNITIONS

HackHarvard 2019 | Harvard University　　　　Oct 2019
3rd Best Overall Hack at HackHarvard
Google Codejam Round 1 (Rank - 1778) | Google　　　　Apr 2019
Competitive Coding Competition by Google
SOF International Mathematics Olympiad | SOF　　　　Nov 2015
State Rank -13 (Gold Medal)
International Rank - 137

COMPETITIONS

Devpost

Github Profile
https://github.com/dreamvrutik

Codeforces   **Jul, 2019**
Max Rating : 1637 Grade : Expert

Codechef   **Jul, 2019**
Max Rating : 1792 Grade : Expert

Hackerearth   **Jul, 2019**
Max Rating : 1543 Grade : Specialist

EXTRA CURRICULAR ACTIVITIES

Cricket
Traveling
Chess
Dance
Basketball

LANGUAGES KNOWN

Hindi, Gujarati, English