

Mehul Agrawal

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Education

BITS Pilani Hyderabad Campus <i>B.E. (Hons.) in Computer Science</i>	<i>2017 - Present</i> <i>7.67*/10</i>
Doon International School <i>Higher Secondary (CBSE 12th)</i>	<i>2017</i> <i>93.2%</i>
Summer Valley School <i>High School (ICSE 10th)</i>	<i>2015</i> <i>96.4%</i>

Key Projects

Classification of Nursery Applications using KNN and Naive Bayes *Apr 2019*
Data Mining

- Trained and tested a classification model for ranking nursery applications based on 8 different factors
- Implemented KNN and Naive Bayes from scratch in Python and achieved an accuracy of 89%

Detection of Fraud Credit Card Transactions using Outlier Detection *Mar - Apr 2019*
Data Mining

- Implemented Local Outlier Factor (LOF) and DBSCAN techniques in Python for detecting fraud transactions
- Used PCA for dimensionality reduction and plotted a 2D-Plot of the dataset for different parameters (Epsilon for DBSCAN and K for LOF) highlighting outliers

Movie Database Portal *Feb - Apr 2019*
Database Systems

- Created a web based movie database portal using Apache, MySQL and PHP
- Implemented features like customized homepages, past and upcoming Movies/TV-Shows listings, news/trivia and top lists
- Added functionality like befriending people and following celebrities to make a social network for movie lovers

Cluster Analysis on Amino Acid Sequences *Feb - Mar 2019*
Data Mining

- Implemented K-Means and Hierarchical clustering in Python with agglomerative and divisive approaches using different types of linkages to identify clusters in amino acid sequences

Association Rule Learning on Large-scale Transaction Data *Jan - Feb 2019*
Data Mining

- Implemented Apriori and FP-Growth algorithms from scratch in Python
- Generated frequent item-sets and association rules for different values of support and confidence for both algorithms on a grocery transaction data-set

Hotel Booking Portal *Sep - Nov 2018*
Object Oriented Programming

- Created a complete Hotel Booking Portal using Java and MySQL
- Used Swing for frontend
- Features include creating users, searching hotels, modifying/cancelling bookings and wait-listing

Skills

- Proficient in Python, Java, C/C++, SQL
- Familiar with HTML/CSS

Achievements

- 99.4 percentile (AIR 7194) in Joint Entrance Examination - Main
- 359/450 in BITSAT. Among the top ~2700 students in the country
- School rank 1 in National Science Olympiad (Class 12th) Stage 1 and qualified for Stage 2

Extracurricular

- Sangeet Prabhakar in Tabla from Prayag Sangeet Samiti, Allahabad. (6 year course equivalent to B.A. in Music). Also started **TaalGyan** as an online resource to learn classical music and tabla
- Member at Swaranjali (Classical Music Society of BPHC)
- Member at ELAS (English Language and Activities Society of BPHC)