

# Mehul Agrawal

Birla Institute of Technology and Science, Pilani, Hyderabad Campus, India

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## Education

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

## Experience

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<b>Edifecs, Mohali</b>	May 2019 - Present
Summer Intern	
<ul style="list-style-type: none"><li>Working closely with the engineering and operations team at Edifecs to learn about the challenges faced by the Healthcare Industry, particularly in the United States, and how various IT services are deployed there to improve efficiency and reduce costs.</li><li>Studying the Electronic Data Interchange (EDI) standards and implementation in the context of the Healthcare Industry and the end-to-end process which goes into deploying it.</li></ul>	

## Key Projects

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<b>Classification of Nursery Applications using KNN and Naive Bayes</b>	Apr 2019
<i>Data Mining</i>	
<ul style="list-style-type: none"><li>Trained and tested a classification model for ranking nursery applications based on 8 different factors</li><li>Implemented KNN and Naive Bayes from scratch in Python and achieved an accuracy of 89%</li></ul>	
<b>Detection of Fraud Credit Card Transactions using Outlier Detection</b>	Mar - Apr 2019
<i>Data Mining</i>	
<ul style="list-style-type: none"><li>Implemented Local Outlier Factor (LOF) and DBSCAN techniques in Python for detecting fraud transactions</li><li>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</li></ul>	
<b>Movie Database Portal</b>	Feb - Apr 2019
<i>Database Systems</i>	
<ul style="list-style-type: none"><li>Created a web based movie database portal using Apache, MySQL and PHP</li><li>Implemented features like customized homepages, past and upcoming Movies/TV-Shows listings, news/trivia and top lists</li><li>Added functionality like befriending people and following celebrities to make a social network for movie lovers</li></ul>	
<b>Cluster Analysis on Amino Acid Sequences</b>	Feb - Mar 2019
<i>Data Mining</i>	
<ul style="list-style-type: none"><li>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</li></ul>	
<b>Association Rule Learning on Large-scale Transaction Data</b>	Jan - Feb 2019
<i>Data Mining</i>	
<ul style="list-style-type: none"><li>Implemented Apriori and FP-Growth algorithms from scratch in Python</li></ul>	

- 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

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

## Achievements

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- 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

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- 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)