



Academic Details			
Year	Degree	Institute	CGPA/ Marks(%)
2024	B.Tech Mechanical and Aerospace Engineering	IIT Hyderabad	9
2020	XII (Telangana State Board of Intermediate Education)	FIITJEE JUNIOR COLLEGE, Vittalwadi, Narayanguda, Hyderabad	94.6%
2018	X (Central Board of Secondary Education)	ATOMIC ENERGY CENTRAL SCHOOL-2, Hyderabad	96.8%

## Scholastic Achievements

- Scholarship Awardee of National Talent Search Examination (NTSE) - 2018 with a state-level rank of 11.
- Secured national rank of 2503 and was school topper for National Level Science Talent Search Examination (NSTSE).
- School topper in Class X CBSE Board exam and subject topper in Mathematics, Science and Social Studies.
- Secured an International Rank of 1183 and a Zonal Rank (Andhra Pradesh and Telangana) of 62 in the finals of 19th SOF - National Science Olympiad (NSO).

## Past Experience

- Worked as **SDET Intern** in **MediBuddy** with **QA - Automation** team from January 2023 to June 2023.

## Skills

- **Programming Languages** : C/C++, Java, Kotlin, Python, SQL
- **Web Technologies** : HTML, CSS, Bootstrap, Javascript ES6
- **Testing Frameworks** : Selenium, Appium, TestNG
- **Version Control Systems** : BitBucket
- **Database** : SQLite
- **Engineering Software Tools** : ANSYS, Arduino, Abaqus, SolidEdge
- **Software Tools** : MATLAB, Android Studio, Katalon Studio, TenjinOnline, Jenkins, Postman, Appium Inspector, TestRail, JIRA, Confluence, Jupyter Notebook

## Relevant Courses

### Computer Fundamentals

- Introduction to Programming - Institute Course
- Data Structures & Applications - Institute Course
- Algorithms - on Udemy

### ML Fundamentals

- Introduction to Artificial Intelligence - Institute Course

### Software Development

- Web Development - on Udemy
- Android and Kotlin Development - on Udemy

### Systems

- Computer Architecture - on Udemy
- Operating Systems - on Udemy
- Database Management Systems - on Udemy

### Others

- Probability - Institute Course
- Statistics - Institute Course
- Calculus -I,II - Institute Course
- Transform Techniques - Institute Course
- Elementary Linear Algebra - Institute Course
- Introduction to Entrepreneurship - Institute Course

### Core Theory

- Engineering Mechanics - Institute Course
- Thermodynamics - Institute Course
- Fluid Mechanics - Institute Course
- Mechanics of Solids - Institute Course
- Manufacturing Science - I,II - Institute Course
- Kinematics and Dynamics of Machinery - Institute Course
- Heat and Mass Transfer - Institute Course
- FEM and CFD Theory - Institute Course
- Design of Machine Elements - Institute Course
- Instrumentation - Institute Course

- Modelling and Simulation
- Power and Refrigeration System

- Institute Course  
- Institute Course

#### **Core Labs**

- Fluid Mechanics Lab
- Solid Mechanics Lab
- Physics Lab
- Manufacturing Lab
- Heat Transfer Lab
- FEM Lab
- CFD Lab
- Fabrication Lab - I,II
- Automation Lab
- Digital Fabrication

- Institute Course  
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### **Projects**

#### **Predicting the cancellation of Hotel Booking**

- A machine learning program using logistic regression to predict the cancellations of bookings/reservations in hotels.

#### **Snake Game**

- Developed a basic snake game using C++ language by implementing the game logic, including snake movement, collision detection and score tracking in a terminal - based environment.

#### **Sudoku Solver**

- Developed a basic Sudoku solver program using backtracking and recursions to solve 9x9 Sudoku grids.

#### **Android App Development Project**

Developed and deployed multiple Android applications using Kotlin and Android Studio, such as :

- **QuizApp** : An interactive quiz application with MCQ's, score-tracking and an engaging UI.
- **ChangeColourApp** : A mobile application allowing users to change background color randomly with a tap, featuring a simple and intuitive UI.
- **InchesToCmApp** : A utility application to convert inches to centimeters, providing an input interface for inches and display for converted value in centimeters.

#### **Semester Internship Project : App Automation**

- Developed new and fixed existing automated test scripts using Java, Appium and TestNG to perform Android UI testing on the MediBuddy mobile application, expanding automation coverage to 80% of all UI tests (from ~50% earlier) with ~ 99% pass percentage compared to ~35% earlier.
- Integrated TestRail with the test script and conducted regression testing to verify the impact of bug fixes and new feature implementations on the existing functionality of the MediBuddy app.
- Configured the setup and environment for parallel execution of the Android UI automation test scripts on a local device farm using Jenkins.
- Developed and executed comprehensive end to end test cases using Katalon Studio for the MediBuddy application, covering Android, iOS, API, Visual and Web interfaces, ensuring seamless functionality, interoperability and user experience.

#### **Social Network Distances**

- A Program to measure distance between two people in a social network using Bi-directional Dijkstra algorithm to drastically reduce the exploration time as compared to using traditional algorithms.
- Social Networks are based on connections between people, so its necessary to compute shortest social distance between different people to analyze information spreading performance and latent relationship in a weighted social network for purposes like Facebook friend suggestions etc.
- But it is difficult to compute shortest social distances between two people in the network consisting of millions in a time efficient way using traditional algorithms like Djikstra algorithm, BFS etc.

#### **Estimating percolation threshold (via Monte Carlo simulation)**

- Model of a percolation system using a  $n \times n$  grid. Multiple simulations can be run on the model to provide an estimate of percolation threshold which is used to check the likelihood of percolation occurring.
- It is used in various models like an electrical model to see if it conducts, a social interaction model to see if it can communicate etc.

### **Extracurricular**

- Participated in NSS events held in IIT-Hyderabad
- Participated in national level art/painting competitions like All India Inter AEES art exhibition and secured prizes.

### **Positions of Responsibility**