



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2027	4YRS B.S	IIT Kharagpur	7.91 / 10
2023	Class XII	Narayana Junior College,Visakhapatnam	97.1%
2021	Class X,SSC	Narayana School,Parvathipuram	100%

PROJECTS

Quiz Application

[May'25 - Jun'25]

- Developed an interactive web-based quiz application featuring a modern UI and dynamic user experience.
- The app presents multiple-choice questions, manages timers, and provides instant feedback on answers. Key functionalities include real-time scoring, automatic answer validation, and a responsive design for seamless usability.
- Utilized modular **JavaScript** for logic, **CSS** for styling, and **HTML** for structure. The Project demonstrates strong skills in front-end development, DOM manipulation , event handling, and user interface design.

A pathfinding Visualizer

[Nov'25 - Dec'25]

- Developed an interactive pathfinding tool to visualize the A* search algorithm using Python and Pygame/Tkinter.
- Implemented real-time grid-based visualization with user-controlled start/end points and obstacles.
- Used priority queues and heuristic functions to optimize pathfinding over BFS/DFS algorithms and followed clean code practices and modular design for maintainability and scalability ,strengthened skills in algorithm design, data structures, and GUI development.

Student Management System using BST

[May'25]

- Developed a console-based Student Management System in **C++** using Binary Search Tree (BST) to store and manage student records efficiently, implemented key operations such as insertion, deletion, searching, and in-order traversal to maintain sorted access by roll number.
- Achieved **O(log n)** average-case time complexity for record lookup and updates, demonstrating strong understanding of tree-based data structures.

Job Scheduler using Priority Queue(in C++)

[Jun'25]

- Implemented a job scheduling system in C++ using a greedy algorithm and priority-based sorting to maximize total profit from deadline-constrained tasks. Modeled each job with an ID, deadline, and profit; used a priority queue (via sorting) to select the most profitable jobs within available time slots.
- Achieved optimal job allocation with $O(n \log n)$ time complexity using custom comparators and array-based slot tracking.

SKILLS AND EXPERTISE

Languages: C++ | HTML | CSS | Python | Matlab **Softwares/Platforms:** VS Code | Git | GitHub | Jupyter Notebook

Tools, Frameworks and Libraries: C++ STL | Numpy | Matplotlib | Scikit-learn | Flask

AWARDS AND ACHIEVEMENTS

- Ranked among the **top 3.0%** of **10,00,000** candidates that qualified for Joint Entrance Examination Mains 2023.
- Ranked among the **top 5.0%** of **2,00,000** students that qualified for Joint Entrance Examination Advanced 2023.
- Qualified as one of the 5000 students,for the **Reliance Foundation UG Scholarship** in the year 2023.
- Ranked among **top 1.0% of 2,00,000+** candidates that are qualified for Andhra Pradesh EAMCET 2023.

COURSEWORK INFORMATION

- Probability and Statistics
- Stochastic Processes and Applications
- Numerical methods Laboratory using Matlab
- Programming and Data Structures (Theory+Lab)
- Linear Algebra, Numerical and Complex Analysis
- Real analysis
- Advanced calculus
- Graph theory
- Applied computational methods
- Theory of Partial Differential Equations
- Theory of Computations
- Modern Algebra
- Transform Calculus
- Functional analysis
- Optimization Techniques(Theory+lab)
- Design and analysis of algorithms
- Topology
- Computer organisation and architecture(Theory + lab)

EXTRA CURRICULAR ACTIVITIES

- Athlete, **National Sports Organization** (NSO), IIT Kharagpur
- Volunteer, Swachhata Hi Seva Campaign (2023)
- Volunteer, Shaurya Sports Meet (2023)
- Illumination Team Member, Sarojini Naidu / Indira Gandhi Hall of Residence