



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	B.TECH	IIT Kharagpur	8.70 / 10
2022	TSBIE	Narayana Junior College	98.6%
2020	SSC	Narayana High School	10 / 10

PROJECTS

Social Service Food Delivery System | Course project | (Jan 2024 - Apr 2024)

- This website serves as an platform for restaurants, NGOs and customers, enabling food ordering, donations and various functionalities.
- Restaurants offer leftover food to NGOs at a 50% discount and customers at 20%, fostering community support and sustainability.
- Technologies utilized include React, Express, MongoDB, Cloudinary, Nodemailer, OpenCage, MapQuest, Geolib and Stripe.
- Key features include authentication, menu management, order history tracking, image management for items and profiles, location selection via map interface, profile updates, filtering restaurants on distance and secure payment gateway integration.
- Additional features encompass password retrieval, secure admin access and customizable access timings for restaurant operations.

A C++ Game | Self Project | (Jan 2024 - Apr 2024)

- Developed a customizable C++ game for Windows (32-bit and 64-bit) leveraging SFML for graphics and ImGui for user interface.
- Technologies used include SFML for graphics rendering ,ImGui for graphical interfaces and maps for storing and rendering objects.
- Implemented features allow for customization of bullet velocity, player color, enemy spawn times, velocities, and player speeds.
- Utilized advanced C++ features such as maps and shared pointers to optimize memory management. Integrated distinct fonts audio cues to enhance user experience, providing unique sounds for shooting, kills and deaths, thereby improving the overall game interaction.

Huffman File Compressor | Self Project | (Apr 2024 - May 2024)

- Implemented Huffman encoding in C++ for efficient file compression, converting data into a binary formata and converts it back to .txt.
- Utilized the Huffman coding algorithm to build a frequency-based binary tree, generating optimal prefix codes for efficient compression and storing each code as a string map for bitwise character encoding into the .bin compressed file using bitwise operators.
- Generated .bin files include the count of unique characters, total character count, Huffman encoding information and encoded data.
- The algorithm scans the input to calculate character frequencies, constructs a Huffman tree and assigns binary codes to each character.

Registration Portal | Course Project | IIT Kharagpur | (Jan 2024 - Apr 2024)

- Developed an efficient online registration portal for students and teachers to seamlessly manage essential personal information.
- Created an intuitive GUI using Tkinter for efficient data entry and retrieval, significantly enhancing user interaction.
- Ensured secure storage and integrity of user data in a text file, incorporating functionalities for user detail edits and account deletions.
- Implemented enhanced security measures with disabling after three incorrect password attempts, integrating Python and Tkinter.

SKILLS AND EXPERTISE

- **Programming Languages:** C, C++, Python, Bash, JavaScript, Gawk
- **Markup and Styling Languages:** HTML, CSS
- **Frameworks and Libraries:** React, Node.js, SFML, Dear ImGui, Tkinter, NumPy, OpenCV, Windows.h
- **Tools and Utilities:** MongoDB, Valgrind, Gprof, GDB, Grep.
- **Os:** Windos,Linux.

AWARDS AND ACHIEVEMENTS

- Secured an All India Rank of **799** in **JEE Advanced 2022** among 200,000 qualified candidates conducted by GOI.
- Secured an All India Rank of **737** in **JEE Mains 2022** among 1000000 attempted candidates conducted by NTA.
- Qualified for **Kishore Vaigyanik Protsahan Yojana (KVPY)** by securing an All India Rank of **416** in 2022.
- Secured an State Rank of **196** in **TS EAMCET 2022** of 237435 attempted students conducted by TS GOV.
- Achieved a rating of 1300 + in **Codeforces** by actively participating in competitive programming contests.

COURSEWORK INFORMATION

- **Mathematics:** Probabilty and Statistics, Advanced Calculus, Linear Algebra, Numerical and Complex Analysis, Discrete Mathematics.
- **Computer Science:** Software Engineering + lab, Algorithms I + lab, Formal Language and Automata Theory, Discrete Structures, Switching Circuits and logic Design + lab, Systems Programming Laboratory, Programming and Data Structures.
- **Others:** Introduction to Innovation and Entrepreneurship, Basic Electronics + lab, General Psychology.
- **Online:** Capital Markets Immersion: A Financial Markets Introduction(Udemy),Version Control by Git(Udemy)..

EXTRA CURRICULAR ACTIVITIES

- Completed a four-semester course in Health and Fitness, earning a 100% certificate.
- Proficient pianist with three years of experience.
- Actively engaged in personal investing, analyzing market trends, financial statements, and testing strategies on simulated trading platforms