



Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2022 - Present	B.Tech	Indian Institute of Technology, Jodhpur	7.13/10
2022	ISC(XII)	Wendy High School, Kanpur	96%
2020	ICSE(X)	Wendy High School, Kanpur	97.8%

Key Projects

- **Chess Platform** [WebDemo](#) [GitHub](#) (May'24- Jul'24)
 - Developed a full-stack chess application using **React.js** for dynamic frontend interfaces and **Node.js** for scalable backend services.
 - Integrated **Firebase** services, including Firestore for efficient data storage and authentication for secure user access control.
 - Deployed on **AWS EC2** instances to ensure high availability and performance.
 - Implemented **WebSocket** technology for real-time gameplay interaction between players.
 - Enhanced user experience with **Three.js** for engaging 3D animations and visual effects.
- **Chatbot** (July'23-Dec'23)
Mentor: Prof.Arpit Khandelwal,
 - The College Chatbot is an **AI-powered** interactive assistant built with **Flask** and **LlamaIndex**, leveraging **Google's PaLM** language model and **Langchain** embeddings. It answers college-related questions by processing and indexing documents stored in a persistent context. Users can interact through a simple web interface, receiving accurate and efficient responses, and the system supports real-time communication and secure user authentication.
- **Movie Recommendation System** (Mar'24- May'24)
Mentor: Prof.Anand Mishra, [Project Page](#) [GitHub](#)
 - Led a team of six analysts to analyze traditional machine learning algorithms for personalized movie recommendations.
 - Implemented and evaluated collaborative filtering and content-based filtering methods using the MovieLens dataset, exploring techniques to enhance recommendation effectiveness.
 - Developed custom scripts utilizing multicore processing to automate analysis, achieving a **75% reduction in execution time**, significantly expediting development cycle.
 - Delivered insights on computational efficiency, cold-start handling, and recommendation quality.

Skills

- **Data Analysis:** MySQL, Pandas, Scikit-Learn, Numpy, Streamlit
- **Programming Languages:** C, C++, Python, JavaScript, Bash Script, Verilog, Java, Flutter
- **Development:** HTML, CSS, React.js, Node.js, Express, FIGMA, SQL, Tkinter
- **Soft Skills:** Leadership, Analytical and Strategic thinking, Problem-Solving, Reasoning
- **Skills:** Competitive Programming, User Interface, Photoshop, Tensorflow, Vivado

Achievements

- **National Talent Search Examination (NTSE) Scholar** - Cleared the prestigious NTSE exam, securing a scholarship awarded by the National Council of Educational Research and Training (NCERT) for academic excellence.
- **Cleared JEE Advanced** - Achieved a rank of 5173 in the Joint Entrance Examination (JEE) Advanced, securing admission to the prestigious Indian Institute of Technology (IIT) Jodhpur.
- Selected for the prestigious **Amazon ML Summer School 2024**, a highly competitive program in Machine Learning and Artificial Intelligence, with only 3,000 students chosen.

Relevant Courses

Data Structure and Algorithms
Pattern Recognition Machine Learning
Probability and Statistics
Introduction to Computer Science
Computer Architecture (In Progress)

Software Engineering
Digital Design
Maths for Computing
Quantum Computing
Operating System (In Progress)