ATISH KUMAR

Final Year | Electrical Engineering | IIT Jodhpur

+91-9508813493 | kumaratish7009@gmail.com | b22ee015@iitj.ac.in | ⦿ | in | ⬈

Education

Indian Institute of Technology Jodhpur, India	Nov 2022 – May 2026
Bachelors of Technology in Electrical Engineering	Current CGPA: 7.50/10
Gurukul Vidyapeeth, Hajipur	May 2014 – Apr 2022
Secondary & Higher Secondary Education	HSC: 96.2% · SSC: 96.6%

Experience

Summer Research Intern IIT Jodhpur — May 2025 - Sep 2025

Mentor: Dr. Binod Kumar
- Developed optimization modules for chiplet-based architectures, enhancing placement and routing efficiency by reducing latency and wirelength.
- Collaborated in a 3-member team, employing Agile workflows, version control, and GitHub Actions to streamline development.
- Benchmarked algorithms on real-world datasets and generated insights contributing to conference-level publications.

Projects

Snazzy Shop Website — June – Aug 2025

React.js · Node.js · Express.js · MongoDB · Tailwind CSS · JWT — Website ⬈ ⦿
- Engineered a full-stack e-commerce application with secure authentication, product catalog management, and shopping cart functionality.
- Designed REST APIs and integrated MongoDB for scalable, persistent, and secure data handling.
- Built a responsive React.js frontend styled with Tailwind CSS for a seamless cross-device experience.

Travel Tracker — Jan - Feb 2025

Node.js · Express.js · EJS · PostgreSQL ⦿
- Developed a web-based travel diary that enables users to log destinations, trip details, and notes in a structured format.
- Implemented PostgreSQL schemas for itinerary management and optimized server-side logic using Express.js.
- Leveraged EJS templates for generating dynamic views, ensuring an interactive and user-friendly interface.

Heart Stroke Predictor — Mar - May 2024

Python · Scikit-learn · Google Colab ⦿
- Implemented an end-to-end ML pipeline for stroke risk prediction, covering preprocessing, model training, and evaluation.
- Experimented with multiple algorithms (ANN, Random Forest, KNN, Decision Tree, Naive Bayes) and benchmarked their performance.
- Analyzed feature importance to identify key medical risk factors, improving model interpretability.

MIPS Compiler and Simulator — Oct - Nov 2024

Python · MIPS Assembly ⦿
- Built a compiler and simulator supporting R, I, and J-type MIPS instructions with label resolution and error handling.
- Developed a parser to translate assembly instructions into binary machine code, validated with many test programs.
- Enabled step-by-step simulation of instructions, serving as a learning tool for understanding computer architecture.

Achievements

- Secured **All India Rank in top 1.5%** among 160,000+ candidates in **JEE Advanced 2022**.
- Qualified **JEE Mains 2022** out of 10,00,000+ candidates.
- Solved **300+ Data Structures and Algorithms problems** across LeetCode, GFG, and other platforms.

Technical Skills and Relevant Coursework

- **Languages:** Python, C/C++, JavaScript/TypeScript, SQL (MySQL, PostgreSQL), MongoDB
- **Frameworks/Tools:** Node.js, Express.js, React.js, FastAPI, Docker, AWS, Git/GitHub, REST APIs
- **AI/ML:** Scikit-learn, NumPy, Pandas, Matplotlib
- **Coursework:** Data Structures and Algorithms, Pattern Recognition and ML, Artificial Intelligence, Computer Architecture, Probability & Statistics, Linear Algebra & Calculus, Signals and Systems, Digital Design

Positions of Responsibility & Extracurricular

- Served as **Assistant Head** for Ignus, the cultural fest of IIT Jodhpur.
- Contributed as **Assistant Head** for Varchas, the sports fest of IIT Jodhpur.
- Represented IIT Jodhpur as a participant in the **Inter IIT Cultural Meet 6.0**, showcasing cultural and creative skills on a national platform.
- Actively engaged as a **Core Member** of the Dramatics Society at IIT Jodhpur, contributing to stage performances, script development, and club activities.