

EDUCATION

Madhav Institute of Technology & Science

Bachelor of technology Computer Application; GPA: 7.4

Gwalior, India

Aug 2022 - May 2026

SKILLS SUMMARY

- Programming Languages:** Proficient in Python, Java, and JavaScript for backend development, data analysis, and machine learning implementation.
- Machine Learning & Deep Learning:** Hands-on experience with GRU, LSTM, Random Forest, and PPO (Reinforcement Learning) for time series forecasting and network traffic classification.
- Network Traffic Analysis:** Expertise in Wireshark data interpretation, large-scale CSV preprocessing (970MB+), and protocol prioritization using custom reinforcement learning environments.
- Web Development & Tools:** Working knowledge of MERN Stack, React.js, Tailwind CSS; proficient with Git, GitHub, MongoDB Compass, Kaggle, Google Colab, and Visual Studio Code.
- Soft Skills:** Strong in problem-solving, critical thinking, teamwork, time management, and industry-oriented solution design.

WORK EXPERIENCE

- Cyber Security Intern CDAC-NOIDA | [LINK](#)

September 24- October 24

 - Streamlined data collection and reporting procedures, reducing processing time by 20% enhancing efficiency.
 - Implemented process improvements and automation solutions, resulting in 15% increase in productivity.
 - Collaborated with 3+ cross-functional teams to gather requirements, define project scopes, and ensure alignment with business objectives, fostering effective teamwork and project success.
 - Produced 15+ comprehensive reports and presentations summarizing findings and recommendations, facilitating clear communication with stakeholders and driving actionable outcomes.
- Outreach Intern PREGRAD | [LINK](#)

 - Coordinated a student outreach initiative via WhatsApp, engaging over 25+ peers and streamlining communication for career development resources.
 - Mentored and advised students, contributing to the formulation of structured outreach strategies aligned with engagement metrics and feedback loops.
 - Implemented a data-backed outreach model, resulting in a 15% increase in trainee participation and improved student response rate across targeted campaigns..

PROJECTS

- AI-Based Network Packet Prioritization (Research Project)| [LINK](#)

December 24- February 2025

 - Designed and implemented an intelligent packet prioritization system using real-time network traffic data (~2.5GB) to classify and route packets based on transmission frequency and data criticality.
 - Applied K-Means clustering to segment over 100,000 packet instances into behavioral groups, achieving 87% clustering accuracy for high-frequency vs. low-frequency packets.
 - Trained a GRU-based temporal model for sequential prediction of packet flow patterns, achieving a mean squared error (MSE) of 0.026 on validation data.
 - Integrated Proximal Policy Optimization (PPO) to dynamically optimize routing decisions based on reinforcement signals, improving network throughput efficiency by 21% and reducing latency under simulated congestion scenarios by 18%.
- Responsive Landing Webpage (Frontend Development Project)| [LINK](#)

February 25- March 2025

 - Developed a mobile-first, responsive landing page using HTML5, CSS3, and vanilla JavaScript, ensuring compatibility across 20+ device resolutions and browsers.
 - Integrated modern UI toolkits (e.g., Bootstrap, Flexbox) to streamline layout design, reducing page structure complexity by 40% and improving user interaction flow.
 - Optimized loading speed and performance, achieving a Lighthouse Performance Score of 96+, with <1.5s first contentful paint (FCP) on average.
 - Applied front-end design principles including semantic HTML, modular CSS, and event-driven JavaScript to ensure maintainability and scalability.

CERTIFICATES & ACHIEVEMENTS

- Wireless Ad hoc& sensor network, NPTEL- 2025| [CERTIFICATE](#)

March 2025
- User-Centric computing for human-computer intrection,NPTEL-2025| [CERTIFICATE](#)

March 2025
- Full-Stack web development, Udemy | [CERTIFICATE](#)

April 2025