Yash Khare



Technical Skills

- **Programming Languages:** Python, C++, Java, C.
- Frameworks, Libraries, and Tools: MetaSploit, OpenCV, Pandas, Keras, Scikit-learn, Jupyter Notebook, Git
- Problem-Solving Expertise: Solved 125+ algorithmic challenges on LeetCode; skilled in algorithms, data structures, dynamic programming, and problem-solving techniques.
- Machine Learning & AI: Proficient in classification, regression, clustering, and computer vision.
- Relevant Courses: Algorithms, Data Structures, Data Analysis, Data Science

Projects

Meditech - Smart Hospital Management System

June 2024 - Oct 2024

Group Project

- Designed queuing algorithms to reduce patient wait times and improve workflow.
- Developed a web-based interface for healthcare providers, optimizing operational processes.
- Integrated inventory and billing systems.
- Ranked **Top 9** in **SIH** internal hackathon 2024 for healthcare solutions.

Malware Detection in Android Applications

Dec 2024 - Present

Group Project

- Developing an Android malware detection system using static analysis (permissions, API calls) and dynamic analysis (runtime behavior, network activity).
- Utilizing tools like **Androguard**, and **Wireshark** to extract features from APK files and identify suspicious patterns.
- Designing an AI based security reporting system to classify threats and generate detailed malware analysis reports.

Gesture Controlled Car using IoT

Jan 2025 - Present

Group Project

- Designed and developing a hand gesture-controlled car using nRF24L01 wireless communication and Arduino
- Accelerometer-based gesture recognition to control vehicle movement remotely.
- Using C++ (Arduino IDE) to process hand gestures and transmit.
- Tools/Tech Used: C++, Arduino.

Sudoku Solver Jan 2023 – Apr 2023

Individual Project

- Designed a **Backtracking**-based algorithm to solve Sudoku puzzles efficiently.
- Built a Python GUI for user-friendly input, validation, and solution visualization.
- Enhanced my **Problem solving skills** and **deep constrain based problems**.

Education

Charotar University of Science and Technology

Aug 2023 – Present

B.Tech in AI and Machine Learning

Changa, Gujarat

- Current CGPA: 9.06

Edunova, Maninagar High School (State Board) Jun 2022 – May 2023

tigh School (State Boara)

Ahmedabad, Gujarat

- 12th Board Result: 88.84%

Achievements

- Academic Excellence: Achieved 2nd rank in Semester 3 (SGPA: 9.26/10); awarded the MYSY Government Scholarship.
- Certifications: Earned 4 certificates on HackerRank, including Problem Solving (Intermediate); completed the Google CyberSecurity Certificate and Data Structures and Algorithms with Java (NPTEL, IIT Kharagpur).
- **Competitions:** Ranked in the **Top 10**% in the CodeKaze DSA Hackathon and participated in the Dose DSA Hackathon.
- Cybersecurity: Hands-on experience with cybersecurity tools such as Hydra and John for password cracking using brute force, as well as Burp Suite for penetration testing of web applications and Metasploit framework for exploitation Participated in *TryHackMe's Advent of Cyber*, gaining practical experience in ethical hacking and vulnerability assessment.
- Soft Skills: Strong team collaboration, adaptability, and effective communication demonstrated through group projects and hackathons.