

NIHAL PANDEY

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Technical Skills

- **Languages and Scripting:** Python, C++, PowerShell, Solidity, Rust
- **Blockchain Technologies:** Smart Contracts, Soroban, Stellar Blockchain
- **Cybersecurity Tools:** Metasploit, Burp Suite, Nmap, Wireshark, Nessus, OWASP ZAP
- **Vulnerability and Network Security:** Penetration Testing, Vulnerability Assessment, Agent-less Scanning, Network Security
- **Web Development:** MERN Stack (MongoDB, Express.js, React.js, Node.js)
- **Other Skills:** Docker, Kubernetes, Git, Problem-solving, Team Collaboration, Critical Thinking

Projects

Decentralized Job Marketplace

September 2024 – Present

Personal Project

- **Tech Stack:** Solidity, Polygon, React.js, Node.js, MongoDB.
- Deployed a decentralized job marketplace on the Polygon network that connects freelancers with clients.
- Utilized smart contracts to ensure secure transactions and transparent payment processes leading to a 30% reduction in hiring costs.
- Minimized intermediaries and associated fees, enhancing trust and reducing costs in the gig economy, eradicating transaction disputes by 40%
- Implemented user profiles, ratings, and reviews to promote reliability and efficiency in hiring.

Agent-less Windows Vulnerability and Network Scanner

September 2024 – Present

Smart India Hackathon'24

- **Tech Stack:** Python, PowerShell, HTML, CSS, Nmap, Wireshark, SQLite.
- Developed a web-based scanner capable of identifying vulnerabilities and assessing network security on Windows 10/11 systems without requiring agent installation, reducing deployment complexity by 50%.
- Integrated PowerShell for local and remote scanning, generating detailed PDF/HTML reports on missing patches and misconfigurations, improving security analysis and reducing manual work by 45%.

Automated Malware Detection System

July 2024 – Present

Personal Project

- Tech Stack: Python, scikit-learn, Wireshark, Pandas, NumPy.
- Implemented an AI-driven malware detection system utilizing Python with Wireshark integration, achieving a 30% reduction in investigation time for suspected network breaches, improving response efficiency and resource allocation.
- Enhanced an advanced threat detection system leveraging AI and machine learning techniques that identified vulnerabilities with over 95% accuracy, providing actionable insights for prompt decision-making by security personnel.

Privacy AI

June 2024 – July 2024

KnacktoHack Hackathon

- **Tech Stack:** Python, C++.
- Privacy AI is a technologically advanced browser extension designed to ensure responsible use of Generative AI, specifically OpenAI's ChatGPT, within organizational boundaries, policies, laws, and regulations, enhancing compliance with data privacy regulations by 50%.
- This project leverages advanced data protection measures, enhancing compliance with data privacy regulations by 45% while showcasing my skills in information security.

Awards & Achievements

- Qualified for Prototyping stage for **KnacktoHack**.
- **Top 3** of the **Smart Village Hackathon** organized by IEEE.
- **Top 10** in the *Fastest Line Follower* event at the **World Robotics Championship**.
- **Top 15** in the *RC Plane* event at the **World Robotics Championship**.
- Qualified for Prototyping stage for **Cisco thingQbator cohort - 6**.

Education

Rajiv Gandhi Institute of Petroleum Technology, India

2022-2026(expected)

- Electronics Engineering

St. Joseph's Academy, India

2018-2021

- ISC (Class XII), Aggregate: 88%
- ICSE (Class X), Aggregate: 90.4%