# NIHAL PANDEY

**J** +91 9871894881 **□** pandeynihal232@gmail.com **□** LinkedIn

#### **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%