

Mannat Pal

palmannat5@gmail.com | [linkedin/MannatPal](https://www.linkedin.com/in/MannatPal) | github.com/Mp771 | +91-9760655689

EDUCATION

Vellore Institute of Technology Bhopal University, Bhopal

B.Tech, Department of Computer Science and Engineering

October, 2022 – Ongoing

CGPA - 8.82

MASD Public School, Panipat

Class XII Central Board of Secondary Education (CBSE)

May, 2019 – March, 2021

Percentage: 86.4%

Airforce School, Gorakhpur

Class X Central Board of Secondary Education (CBSE)

August, 2017 – April, 2019

Percentage: 89.4%

PROJECTS

Malware Analysis for Android Apk using Machine Learning | Python, Androguard, Scikit

September, 2025

- Conducted static (**80%**) and dynamic (**20%**) analysis on Android APKs to detect malicious behavior and code anomalies. Extracted key features such as permissions, API calls, and intent filters for machine learning-based classification.
- Implemented Random Forest, XGBoost, and Logistic Regression models, achieving **95%** detection accuracy on benchmark datasets. Automated the feature extraction and risk scoring process, reducing manual analysis time by **60%** and improving consistency across malware samples.

Available here: [Malware Analysis GitHub](#)

Portfolio | HTML, CSS, JAVASCRIPT

August, 2023

- Developed and deployed a personal portfolio website using HTML5, CSS3, and JavaScript, showcasing projects, skills, and background with a clean, responsive design.
- Integrated EmailJS to enable a fully client-side contact form without requiring a backend, allowing visitors to send direct messages from the site.
- Implemented dynamic behaviors and smooth navigation (e.g. scroll animations, section toggling) to enhance user experience and engagement across devices. **Available on Vercel:** [Portfolio Website](#)

Encryption & Decryption Algorithms | Python

August, 2023

- Implemented a variety of encryption algorithms including RSA, Diffie-Hellman, AES, IDEA, HMAC, Rail Fence, Row Transposition, and ADFGVX, achieving up to **99% correctness** in encryption-decryption tests.
- Designed and tested each algorithm's pipeline, improving execution efficiency by **30%** on average while illustrating core cryptographic principles.
- Developed and documented ten encryption algorithms (over 800 lines of code), ensuring **100% successful encryption/decryption** across benchmark datasets. **Available on GitHub:** [Encrypt/Decrypt Algorithms Repository](#)

TECHNICAL SKILLS

Programming Languages: C/C++, Python, HTML5, CSS, MySQL

Core CS Skills: Object-Oriented Programming, Computer Networking, Database Management Systems, Operating Systems

Developer Tools: GitHub, VSCode, Docker, AWS, SQL Developer

Cybersecurity & Malware Analysis: Androguard, APKTool, Cuckoo Sandbox, Burp Suite, OWASP ZAP, Metasploit, Nmap, Wireshark, SQLMap, Nikto

Machine Learning: Scikit-learn (Decision Tree, Random Forest, Naive Bayes), XGBoost, Pandas, Numpy, Matplotlib

CERTIFICATIONS

The Bits and Bytes of Computer Networking

Offered by Google

Tools of the Trade: Linux and SQL

Offered by Google

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Event Management Lead

April 2024 – March 2025

Content and Creation Lead

December 2022 – April 2024

Content Lead

December 2023 – May 2024

Mozilla Firefox Club, VIT Bhopal

Organized and managed events related to web technologies.

Cyber Warriors, VIT Bhopal

Led content creation and cybersecurity awareness initiatives

Linux Club, VIT Bhopal

Managed technical content and conducted workshops on Linux and open-source tools.