EDUCATION

Thapar Institute of Engineering and Technology (TIET)

2022 - 2026

B.Tech in Computer Science and Engineering

Patiala, Punjab

TECHNICAL SKILLS

Programming: C/C++, Python — Web: Flask, HTML/CSS, Streamlit — ML/NLP: Scikit-learn, Pandas, NumPy, TF-IDF

Cybersecurity: Fileless Malware Detection, MITM Simulation, Network Traffic Analysis — Tools: Kali Linux, Bettercap, Wireshark

Visualization: OpenGL, GLUT — Blockchain: Solana, Anchor, Merkle Trees — OS: Windows, Linux

EXPERIENCE

Blockchain Intern - ELC Summer Internship, TIET

June 2025 - July 2025

Patiala, Punjab

- Developed a Solana-based secure logging prototype using Merkle tree batching for Windows event logs.
- Integrated IPFS for off-chain storage and built a Streamlit interface for real-time verification visualization.
- GitHub: github.com/chauhan-pratham/solana-secure-logging-prototype

Cybersecurity Summer Trainee – Acmegrade

Aug 2023 – Oct 2023

Remote

- Simulated MITM attacks using Bettercap and Wireshark; tested internal threat visibility.
- Automated sniffing and redirection using custom caplets leveraging Bettercap modules (e.g., arp.sniff, hstshijack).
- Compiled detailed technical reports and logs based on packet capture analysis and simulations.

ACADEMIC PROJECTS

Sentinel Monitor - System Dashboard

Jan 2025 - May 2025

- Developed a real-time monitoring dashboard with dynamic graphs for CPU, memory, and bandwidth usage.
- Built using C++, OpenGL, Windows API, and GLUT.

Email/SMS Spam Classifier

Aug 2024 - Nov 2024

- Implemented custom NLP pipeline with TF-IDF vectorization and logistic regression for spam detection (~95% accuracy).
- Deployed on Streamlit with interactive filtering and text preview interface.
- Tech Stack: Python, Scikit-learn, Streamlit, NLTK

ChatMinds - Flask-based Chatbot

Jan 2024 - May 2024

- Built a Flask chatbot to respond to user intents using JSON-based dialogue management.
- Created interactive UI with HTML/CSS for web deployment.
- Tech Stack: Python, Flask, HTML, CSS, JSON

CERTIFICATIONS

AWS Academy Cloud Security Foundations

May 2025

Topics: IAM, Secure Networking, Shared Responsibility, CloudTrail

AWS Academy Cloud Security Builder

May 2025

Topics: Encryption, KMS, AWS CloudWatch, Security Automation