Omkar Choudhury

in LinkedIn | 🞧 GitHub

Education

Vellore Institute of Technology (VIT), Vellore, Tamil Nadu

Expected July 2026

Bachelor of Technology, Computer Science — Specialization in Information Security

Cumulative GPA: 8.7/10

Relevant Coursework: Ethical Hacking & Penetration Testing, Offensive and Defensive Security

Technical Skills

Core Competencies: Cybersecurity & SIEM Deployment, Threat Detection & Attack Simulation, Machine Learning

& Data Analysis, Risk Assessment Languages: Python, SQL, Bash

Frameworks & Libraries: TensorFlow, Scikit-Learn, Pandas, NumPy, Matplotlib, PyTorch

Security & SIEM Tools: ELK Stack, Splunk SIEM, Atomic Red Team, Wireshark, Nmap, Metasploit, Ghidra

CTF & Offensive Security: Reverse Engineering, Binary Exploitation, Steganography, Forensics,

Cryptography Challenges

Databases: MongoDB, MySQL, CSV/JSON Data Processing

Platforms & OS: Kali Linux, Ubuntu Server, Windows Security Lab Dev Tools: Docker, Git, NGINX, Linux Server Administration

Work Experience

Backend Developer Intern — TimeSlotter Technologies Private Limited

May 2025 - July 2025

- Engineered FastAPI appointment system serving large number of daily bookings with JWT auth.
- Built RESTful APIs handling 10,000+ requests/day with 99.5% uptime via Docker.
- Streamlined database migrations reducing deployment time by 75%.

Projects

Elastic-SIEM-Simulation – Security Information & Event Management Lab

GitHub

- Built SIEM lab processing 5,000+ logs/day from 15+ endpoints using Elastic Beats.
- Created 5+ Kibana dashboards and 8+ detection rules, improving threat coverage by 40%.
- Automated 15+ MITRE ATT&CK simulations, reducing detection time from 45 to 12 minutes.

AegisVision – AI-Powered Surveillance System for Anomaly Detection

GitHub

- Developed hybrid YOLO + VideoMAE anomaly detection achieving 92% accuracy.
- Built Streamlit dashboard processing 24/7 feeds, reducing manual monitoring by large margin.
- Achieved 0.87 ROC-AUC on Avenue & UCSD datasets, outperforming baselines by 15%.

NetProtect - Network Security and Threat Detection Platform

GitHub

- Built modular platform capturing daily traffic with real-time packet analysis.
- Integrated signature-based IDS with ML models detecting 98% of known threats.
- Created responsive dashboards enabling 3x faster threat identification for SOC teams.

Achievements

UST GenCys CTF — National Finalist

2025

Secured finalist position among top 50 teams in national cybersecurity CTF.

Carnegie Mellon PicoCTF — Global Top 100

2025

Ranked 87th globally among 70,000+ participants in largest student competition.

Certifications

Go	ogle:	Artificial	Intelligence	using	TensorFlow
----	-------	------------	--------------	-------	------------

link

Microsoft: Azure AI Fundamentals

link

Oracle: OCI 2025 Generative AI Professional

link