AMRITANGSHU DEY

Contact: amritangshu.dey2026@gmail.com | +91-7002094397 | Mumbai, Maharashtra

ACADEMIC QUALIFICATIONS				
Year	Qualification	Institute	%/CGPA	
2026	B.Tech (CSE - Cyber Security)	Vellore Institute of Technology, Bhopal	8.73 - Present	
2022	Class XII (CBSE)	Vivekananda Kendra Vidyalaya, Tinsukia	77.2%	
2020	Class X (CBSE)	Vivekananda Kendra Vidyalaya, Tinsukia	86.6%	

ACADEMIC PROJECTS

DNS Exfiltration Attack Disclosure with Machine Learning (ML)

Aug 25 – Present

- Currently leading a 5-member team in an ongoing Capstone project to develop a DNS-based data exfiltration disclosure system
 using machine learning (ML), targeting around 85–90% accuracy for malicious traffic detection across small and large-scale
 attacks
- Tools: Python, Scikit-learn, Pandas, Feature Engineering

Secure EHR Analytics using Federated Learning (FL) and Homomorphic Encryption (HE)

Sep 24 – Dec 24

- H led a 7-member team to design a secure EHR analytics system using Federated Learning with CKKS Homomorphic Encryption and SMPC, achieving 94.2% model accuracy while ensuring zero patient data exposure during decentralized training.
- Tools: Python, FL Framework, CKKS Homomorphic Encryption, Secure Multi-Party Computation (SMPC)
- Link: https://github.com/amritofficial88/Secure-EHR-Analytics-using-FL-and-HE

Vectword Jun 24 – Aug 24

- He created a password manager in Python with AES-256 encryption, TOTP-based 2FA, and a simple CLI, ensuring secured local credential storage and improving management efficiency by 80%.
- Tools: Python, cryptography, pyotp, qrcode, AES-256, TOTP, CLI
- Link: https://github.com/amritofficial88/vectword-main

SKILLS & CERTIFICATIONS			
Skills	 Programming & Scripting: Python, SQL, PowerShell Data Analysis Tools: Power BI, Tableau, Excel, Matplotlib, Seaborn, ETL AI Tools: TensorFlow Federated, NLP, LangChain (Basic), GPT API Security Technologies: SIEM, Splunk, Log Analysis, VAPT 		
Certifications	 SY0-701: CompTIA Security+ SC-200T00-A: Microsoft Security Operations Analyst Certified AppSec Practitioner (CAP) – The SecOps Group 	Ongoing Jul – 25 Jan – 25	

POSITIONS OF RESPONSIBILITY

- Served as Project Coordinator Cyber Warriors Club, VIT Bhopal (2023–2025); mentored juniors and helped organize cybersecurity workshops attended by 150+ participants.
- Served as a member of the Student Welfare Department Committee VIT Bhopal (2022-2023), contributed to student welfare initiatives.
- IEEE MP Division Student Member (2023) assisted in organizing 3 technical webinars and 1 workshop.

ACHIEVEMENTS & EXTRA-CURRICULARS

- **Secured Runners-up** Position at DeveloperWeek Hackathon 2025 (Devpost) by prototyping an AI-Powered phishing detection tool in a team of 4, among **300+** teams nationwide.
- Achieved 97.3 percentile in IEE Mains 2022, with 280,000+ candidates participating nationally.
- Assisted in faculty-guided research on encryption standards during 3rd year, gaining exposure to practical cryptographic applications.
- Published 3 articles on MLSecOps and Security related solutions, demonstrating subject matter importance on social publishing platforms.

LinkedIn: Link | Portfolio: Link | Github: Link