

# AMRITANGSHU DEY

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

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
<ul style="list-style-type: none"><li>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 <b>85–90%</b> accuracy for malicious traffic detection across small and large-scale attacks</li><li><b>Tools:</b> Python, Scikit-learn, Pandas, Feature Engineering</li></ul>			
Secure EHR Analytics using Federated Learning (FL) and Homomorphic Encryption (HE)			Sep 24 – Dec 24
<ul style="list-style-type: none"><li>Led a 7-member team to design a secure EHR analytics system using Federated Learning with CKKS Homomorphic Encryption and SMPC, achieving <b>94.2%</b> model accuracy while ensuring zero patient data exposure during decentralized training.</li><li><b>Tools:</b> Python, FL Framework, CKKS Homomorphic Encryption, Secure Multi-Party Computation (SMPC)</li><li><b>Link:</b> <a href="#">Here</a></li></ul>			
Customer Segmentation: RFM and K-Means Clustering			June 23 – July 23
<ul style="list-style-type: none"><li>Implemented customer segmentation using RFM analysis and K-Means clustering to classify high-value and at-risk customers, enabling data-driven personalized marketing strategies.</li><li><b>Tools:</b> Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn</li><li><b>Link:</b> <a href="#">Here</a></li></ul>			
SKILLS & CERTIFICATIONS			
Skills	<ul style="list-style-type: none"><li><b>Programming &amp; Scripting:</b> Python, SQL, PowerShell</li><li><b>Data Analysis Tools:</b> Power BI, Tableau, Excel, Matplotlib, Seaborn, ETL</li><li><b>AI Tools:</b> TensorFlow Federated, NLP, LangChain (Basic), GPT API</li><li><b>Security Technologies:</b> SIEM, Log Analysis, VAPT</li></ul>		
Certifications	<ul style="list-style-type: none"><li>SAP Certified Associate: Data Analyst - SAP Analytics Cloud</li><li>SC-200T00-A: Microsoft Security Operations Analyst</li><li>AWS: Data Engineering Foundations</li></ul>		
			Ongoing July – 25 May – 25
POSITIONS OF RESPONSIBILITY			
<ul style="list-style-type: none"><li>Served as <b>Project Coordinator – Cyber Warriors Club</b>, VIT Bhopal (2023–2025); mentored juniors and helped organize cybersecurity workshops attended by <b>150+</b> participants.</li><li>Served as a member of the Student Welfare Department Committee - VIT Bhopal (2022-2023), contributed to student welfare initiatives..</li><li><b>IEEE MP Division Student Member (2023)</b> – assisted in organizing 3 technical webinars and 1 workshop.</li></ul>			
ACHIEVEMENTS & EXTRA-CURRICULARS			
<ul style="list-style-type: none"><li><b>Secured Runners-up</b> Position at DeveloperWeek Hackathon 2025 (Devpost) – by prototyping an AI-Powered phishing detection tool in a team of 4, among <b>300+</b> teams nationwide.</li><li><b>Achieved 97.3 percentile</b> in JEE Mains 2022, with <b>280,000+</b> candidates participating nationally.</li><li><b>Assisted</b> in faculty-guided research on encryption standards during 3rd year, gaining exposure to practical cryptographic applications.</li><li><b>Published 3 articles</b> on MLSecOps and Security related solutions, demonstrating subject matter importance on social publishing platforms.</li></ul>			