

AMRITANGSHU DEY

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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">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 attacksTools: Python, Scikit-learn, Pandas, Feature Engineering	
Secure EHR Analytics using Federated Learning (FL) and Homomorphic Encryption (HE)	Sep 24 – Dec 24
<ul style="list-style-type: none">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: Here	
Customer Segmentation: RFM and K-Means Clustering	Jun 23 – Jul 23
<ul style="list-style-type: none">Implemented customer segmentation using RFM analysis and K-Means clustering to classify high-value and at-risk customers, enabling data-driven personalized marketing strategies.Tools: Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learnLink: Here	

SKILLS & CERTIFICATIONS

Skills	<ul style="list-style-type: none">Programming & Scripting: Python, SQL, PowerShellData Analysis Tools: Power BI, Tableau, Excel, Matplotlib, Seaborn, ETLAI Tools: TensorFlow Federated, NLP, LangChain (Basic), GPT APISecurity Technologies: SIEM, Log Analysis, VAPT
Certifications	<ul style="list-style-type: none">SAP Certified Associate: Data Analyst - SAP Analytics CloudSC-200T00-A: Microsoft Security Operations AnalystAWS: Data Engineering Foundations

POSITIONS OF RESPONSIBILITY

<ul style="list-style-type: none">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.
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ACHIEVEMENTS & EXTRA-CURRICULARS

<ul style="list-style-type: none">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 JEE 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.
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