

EDUCATION

Degree	Specialization	Institute	Year	CPI
B.Tech	Computer Science in AI&ML	Anits	2023-Present	9.30
Inter BIEAP	Physics, Chemistry, & Mathematics	Narayana College	2019	8.60
SSC	-	Narayana College	2017	9.80

WORK EXPERIENCE

- **Computer Networks Intern** [NIT Rourkela] May-Jul 2025
 - Coordinated in a team of four to design and implement **Network AI**, an intelligent SDN-based architecture that applies **self-learning control strategies** for autonomous network management
 - Developed and integrated machine learning models into the SDN controller to dynamically optimize **traffic routing, load balancing, and resource allocation** Simulated large-scale network environments using **Mininet and SDN controllers (e.g., Ryu/ONOS)** to evaluate system performance under varying traffic conditions
- **Machine Learning Intern** [Embrizon Tech collaborated with Wipro] Jan-Apr 2025
 - Completed a **Machine Learning Internship** at **Embrizon Tech** in collaboration with **Wipro**, gaining hands-on experience in developing and deploying AI solutions
 - Designed and implemented a **predictive analytics model** using **Python, Scikit-learn, and Pandas** to forecast customer churn with an accuracy of **92%**, enabling proactive retention strategies

PROJECTS

- **NetworkAI: AI-Driven Traffic Optimization in SDN** May-Jul 2025
 - Documented a **comprehensive study on Software Defined Networks (SDN)** by simulating large-scale topologies and drawing **insights on traffic behavior and resource utilization**
 - Built an **AI-driven self-learning control framework (NetworkAI)** that dynamically optimized **routing, load balancing, and resource allocation**, achieving improved **throughput and latency reduction** in simulations
- **Predictive Maintenance using Machine Learning** Jan-Apr 2025
 - Documented a **comprehensive analysis of industrial sensor datasets** by visualizing time-series trends and drawing **qualitative insights on equipment performance and failure patterns**
 - Built a **Predictive Maintenance Machine Learning model** using **Python and TensorFlow** to forecast equipment failures with **93% accuracy**, enabling proactive maintenance and minimizing downtime
- **Social Media Sentiment Analysis Using AWS Kinesis** Nov 2024
 - Designed and implemented a real-time sentiment analysis pipeline using **AWS Kinesis Data Streams** for live social media data ingestion. Processed streaming data using **AWS Lambda** and performed sentiment analysis using **Python NLP techniques**. Stored analyzed sentiment data in **DynamoDB** and **Amazon S3** for fast access and historical analysis. Built visual insights using **AWS QuickSight** to track sentiment trends and public opinion.

TECHINICAL ACHEIVEMENTS

- **Machine learning Hackathon** Nov 2024
 - Participated in a **Machine Learning Hackathon** and secured **Top 2 position** by developing a **Drug Case Predictor and Analyzer**, demonstrating strong skills in predictive modeling and data analysis
 - Led a team of four to design and implement a **Drug Case Predictor and Analyzer**, managing **data pre-processing, feature engineering, and model development**, ensuring **accurate predictions and seamless project delivery**

TECHNICAL SKILLS

- **Languages:** Python, C, Java, Html, CSS, Javascript, MySQL
- **FrameWorks:** Reactjs, ExpressJs, SpringBoot(Basics), TensorFlow
- **Tools:** Jupiter Notebook, LaTeX, VS Code, GitHub, git, AWS, jenkins, Docker, Postman, PowerBi, Excel, Google Colab
- **Moocs:** Financial Markets, Financial Analyst Course, The Complete Investment Banking Course