

# Aryan Bhandari

📍 Darjeeling, West Bengal, India   ✉ aryanbhandari7478@gmail.com   📞 7478484491   in Linked-in   🐙 Git-hub

## EDUCATION

**B.S. (Hons) in Computer Science** | Specialization in Data Science & AI Jul 2023 – Present  
Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Andhra Pradesh, India

**CBSE & AISSC (Physics, Chemistry, Mathematics)** Apr 2009 – Apr 2023  
Army Public School Sukna, West Bengal, India

## EXPERIENCE

**Research Intern at Indian Institute of Technology Ropar**   🐙 [github](#) May 2025 – Jul 2025  
Developed a regression model using Sentence-BERT embeddings, PCA, UMAP, and HDBSCAN to predict speech completion in real time. Achieved MAE of 11.04 and  $R^2$  score of 0.73, validating the semantic saturation hypothesis. Rupnagar, Punjab, India

## Technical Skills

**Programming:** C, C++, Python, Java, Object Oriented Programming  
**Data Science :** Data Visualization, Machine Learning, Deep Learning, Big Data Analytics  
**Mathematics for AI:** Optimization, Calculus, Linear Algebra, Discrete Mathematics, Probability & Statistics  
**Computer Science:** Operating Systems, Computer Networks, Data Structures Algorithms, Basic understanding of Cyber security  
**Databases:** MySQL, MongoDB, DBMS  
**Web Development:** HTML, CSS, JavaScript, React.js, Node.js, Express.js, MongoDB (MERN Stack)

## PROJECTS

**Logistic Regression from Scratch :** Implemented logistic regression from scratch with L2 regularization; validated against Scikit-learn. Achieved 97% test accuracy on Wisconsin Breast Cancer dataset; visualized cost convergence and decision boundaries.   
🐙 [github](#)

**Intrusion Detection Model :** Built a classification model on the NSL-KDD dataset, achieving 90% accuracy with decent F1-score, Precision & Recall in detecting malicious network traffic. Used Numpy, and Pandas for preprocessing and Scikit-learn(XG-Boost) for model training. Visualized network traffic trends using Matplotlib and Seaborn. Deployed using Streamlit.   
🐙 [github](#)

## CERTIFICATIONS

Cyber Security and Privacy – IIT Madras  
Introduction to Machine Learning – Great Learning  
Machine Learning with Python – IBM

## Extra Curricular

**Sergeant at NCC India (Army Wing)** Sept 2019 – Jun 2022  
Trained in weapon handling, disaster management, military drill, map reading, military discipline and leadership. Led a troop of 50+ cadets in Cultural and Adventure activities annually.

**Rock and Semi-classical Guitarist**  
Represented school and university at music events as lead and bass guitarist. Composed, recorded, and produced tracks blending rock with Indian classical ragas. Collaborated to form bands and organize live performances.

## LANGUAGES KNOWN

English | Hindi | Nepali