



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	M.TECH Dual Degree 5Y	IIT Kharagpur	8.57 / 10
2021	AISSCE (CBSE XII)	Indus Valley World School	95.5%
2019	AISSCE (CBSE X)	Indus Valley World School	96.5%

INTERNSHIPS

SRIP Intern, Sustainability Lab, IIT Gandhinagar	[May '23 - Jul '23]
Objective: Contributed in developing Spiromask, enabling the detection of respiratory diseases under Prof. Nipun Batra	
• Extracted crucial lung parameters like FEV1 , FEV2 and FVC from edge collected audio data of approximately 120 people using the Librosa library	
• Engineered a Query by Committee based method of acquisition and Uncertainty Sampling for the better acquisition of training samples	
• Utilised existing ML models like Random Forest , KNN and Catboost , achieving an error reduction of 3% , utilising only 50% of the train dataset	
Machine Learning Engineer, Secugile	[Jun '24 - present]
Objective: Contributed to the development of a gunshot and scream detection algorithm to timely alert the Security	
• Extracted the Mel Frequency Cepstral Coefficients of edge collected audio data of multiple guns and screams using the Librosa audio library	
• Implemented a robust Deep Learning model using Tensorflow's Keras framework and deployed it onto Android compatible Tflite model for testing	
• Achieved an impressive accuracy of 97.6% with 98% recall in the detection of screams and gunshots over diverse dataset of guns and screams	
Quantitative Research Consultant, WorldQUANT	[Dec '23 - present]
Objective: Responsible for analysis of USA and China Stock Markets to generate alphas to optimise portfolio returns	
• Generated 28 active valuable alphas with maximum Sharpe Ratio of 2.89 and achieved returns of over 40% while maintaining Drawdown of less than 10%	
• Responsible for conducting research on the most Liquid Stocks of the USA and China markets across multitude of datasets to gauge trader sentiments	

PROJECTS

Interactive Web Application to Evaluate Time Series Models RTSM Semester Project	[Jan '24 - Mar '24]
Objective: Benchmarking baseline time series models on various datasets based on seasonality and stationarity	
• Categorized datasets based on seasonality and stationarity for comparison on baseline time series models - AR , ARMA , ARIMA and SARIMA	
• Evaluated time series models on datasets with deploying web application on Streamlit with user interactive parameter tuning for enhanced experience	
• Achieved Mean Absolute Percentage Error of 2.7% across all datasets by analysing the Correlation Factor parameter values for given datasets	

COMPETITION/CONFERENCE

Global Semifinalist, Adobe Analytics Challenge 2024	[Feb '24 - Mar '24]
Objective: Secured a spot among the top 20 Global Semifinalist teams from a field of more than 2000 international teams	
• Spearheaded team of three students and provided key Business Solutions for General Motors to boost Build and Buy engagement and purchases	
• Utilised the Adobe Customer Journey Analytics platform to analyse the Customer Base and for recommending personalized marketing strategies	
• Pioneered a propensity score algorithm Priority Boosting to score every potential customer with ~82.3% Accuracy to improve marketing strategies	
Bhashini Sprint Hackathon 2024	[Feb '24 - Mar '24]
Objective: Developed a hardware-based solution integrating NLP and OpenCV algorithms to optimise retail operations	
• Qualified to Top 7 National teams in the competition organised by Government of India, from a competitive pool of over 5000 teams and startups	
• Developed Inventory Management application by integrating Bhashini APIs mitigating linguistic barriers to Streamline Business of Retailers	
• Designed a hardware-based system using Object Detection Algorithms and NLP Techniques for Alert Mechanism for owner on expiry of goods	
Competitive Programming	
• Achieved the status of Specialist on Codeforces platform attaining an all time highest Profile Rating of 1468 (Codeforces handle: tle2004)	
• Attained the rating of 4 star coder on Codechef with achieving an all time high Profile Rating of 1800 (Codechef handle: adityanandy)	
• Secured a Global Rank of 64 in Codechef Starters 140 coding contest of Div 4 among a competitive pool of 19000+ contestants (handle: adityanandy)	

SKILLS AND EXPERTISE

Languages	Proficient: C C++ Python	Familiar: MATLAB HTML CSS Javascript
Libraries/Frameworks	Standard Template Library SQL Numpy Pandas Pytorch Tensorflow Keras Matplotlib Plotly Librosa	
Platforms/Tools	Github Google Colab Kaggle Jupyter Notebook Streamlit Solidworks Arduino LTSpice Microchip Studio	

COURSEWORK INFORMATION

Mathematical:	Probability and Statistics Regression Analysis and Time Series Models Advanced Calculus Linear Algebra and Complex Analysis
Technical:	Artificial Intelligence: Foundation and Applications Deep Learning: Foundation and Applications Database Management Systems
Curriculum:	Programming and Data Structures* Digital Electronic Circuits* Computer Architecture and Operating Systems (* Theory + Lab)

AWARDS AND ACHIEVEMENTS

• Attained an All India Rank of 1665 in Joint Entrance Examination (Advance) 2021 among JEE mains qualified set of 1.5 Lakh Candidates
• Achieved an All India Rank of 1160 in Joint Entrance Examination (Mains) 2021 among a competitive pool of 22 Lakh registered candidates
• Secured an impressive state rank of 40 in West Bengal Joint Entrance Examination 2021 among the competitive set of over 1 Lakh candidates
• Selected for prestigious ML Summer School 2024 program by Amazon demonstrating strong aptitude and coding skills in field of Machine Learning
• Honoured with the Title of National Champion for Four Consecutive Years in the National Abacus Competition Brainobrainfest held in Chennai
• Awarded the title of Mathematician of the East Zone for exceptional problem solving ability in conference of Infinity 2021 organised by BITS Pilani
• Achieved a Zonal Rank 3 in the 8th International Mathematics Olympiad and Zonal Rank 10 in the 7th National Science Olympiad organised by SOF

EXTRA CURRICULAR ACTIVITIES

• Achieved First Runner Up among pool of 80+ Teams from different colleges in RoboSumo Challenge organized by the Technology Robotix Society
• Secured Runner Up position among 400+ Students designing Poscure: Automatic Posture Correcting Chair for Open IIT Product Design 2022
• Spearheaded 25 Students from Patel Hall ideating Automatic Wheel Chair for Paralyzed Patients General Championship 2024 in IIT Kharagpur
• Attained impressive University Rank 25 from competitive pool of 2500+ students in Artificial intelligence competition KIMO Edge Tech Quiz 2024
• Represented school in Zonal Round of the CBSE National Chess Championship at Durg contributing to team's Third Runner-Up performance
• Achieved 9th position in the West Bengal State Chess Tournament in the age group category of Under 13 organised by Shyama Pally Chess Club