

H Aditya Kumar

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[LinkedIn](#) | [GitHub](#) | [Leetcode](#) | [Portfolio](#)

EDUCATION

Indian Institute of Technology Bhubaneswar <i>B. Tech & M. Tech in Mechanical Engineering - CGPA: 8.12</i>	Bhubaneswar, Odisha 2021 – Present
Modern Vidya Niketan, Faridabad <i>Senior School Certificate Examination, CBSE - CGPA 9.6</i>	Faridabad, Haryana 2018 - 2020

EXPERIENCE

Machine Learning Intern <i>Centre for Development of Advanced Computing, Trivandrum</i> <ul style="list-style-type: none">Fine-tuned an IndicWav2vec Speech-to-Text (STT) model on real-world audio from Police Control Room calls, achieving 84% transcription accuracy.Engineered a data extraction pipeline using few-shot learning with LLMs for named-entity recognition (NER) to identify and geo-locate critical information from unstructured text.Developed an interactive crime analytics dashboard for police vehicle deployment, leveraging spatial analysis techniques to visualize crime hotspots.	May 2025 – July 2025
Research Consultant Intern <i>Worldquant LLC</i> <ul style="list-style-type: none">Developed production-level trading strategies using Brain's simulation-based platform for financial simulations.Applied advanced quantitative techniques and data analysis, submitting 30+ strategies for out-of-sample testing.	Jan 2024 – March 2024

PROJECTS

AI-Powered Pupil Dilation Tracking for Disease Monitoring <ul style="list-style-type: none">Designed and deployed a real-time medical image analysis framework using U-Net and CNNs for segmentation and quantification of pupil dilation, enabling early-stage glaucoma detection.Leveraged TensorFlow to train deep learning models, achieving high-precision classification and prediction of pupillary responses under clinical supervision.Built an automated data labeling pipeline to accelerate training cycles, improving scalability and reducing manual effort in handling large datasets.	May 2025
Fantasy Sports Predictions GitHub <ul style="list-style-type: none">Engineered an XGBoost-based predictive model that achieved 95% accuracy in forecasting player fantasy points from 20+ years of historical cricket data.Developed an AI chatbot using Retrieval-Augmented Generation (RAG) for interactive, personalized player selection insights.	Dec 2024
Reinforcement Learning for Chess Engine GitHub <ul style="list-style-type: none">Trained a reinforcement learning agent on 60,000+ game records to build a self-learning chess AI capable of strategic decision-making.Architected a scalable web platform using React and Flask with real-time inference and user interaction.	May 2024

TECHNICAL SKILLS

Programming Languages: C/C++, Python, HTML, CSS, JavaScript, MATLAB, SQL
Technologies/Frameworks: NumPy, Pandas, TensorFlow, OpenCV, Scikit-learn, React, Node.js PostgreSQL
Dev Tools: Git, GitHub, Docker, AWS **Visualization Tools:** Matplotlib, Seaborn, Plotly

CERTIFICATIONS AND ACHIEVEMENTS

Deep Learning - DeepLearning.AI, Stanford University | [Certificate](#)
5th Rank in Inter IIT Tech Meet 13.0 - IIT Bombay
1st Place in Data Detectives Challenge - Wisseinaire(TechFest), IIT Bhubaneswar

LEADERSHIP AND RESPONSIBILITY

Core Member - Tensor Club (ML Society)	Core Head - Alma Fiesta (Cultural Fest)
Core Member - Data Science Club	Core Member - Cinewave (Cinematics Society)
Core Member - Software Development Club	Core Member - Produit (Product Development Club)