# Arnab Deogharia

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## Education

**Banaras Hindu University** 

2024-Present

Masters in Statistics & Computing — CGPA 8.16 (till semester 2)

Varanasi, U.P.

Bachelor of Science in Statistics (Hons.) — CGPA 7.98

2021-2024 Kolkata, W.B.

Experience

## SpectoVX Assistive Technology Pvt Ltd. click

Remote

GenAl Trainee Intern

Sister Nivedita University

July 2025 - Present

· Working in a team on multiple projects involving AI technologies like large language models, image generation, or multimodal AI systems.

## Institute of Data Engineering, Analytics and Science Foundation — ISI Kolkata click

On-site

Data Science Intern

May 2025 - Present

 Working on a project on topic 'A Smart Material Prediction System for Planetary Exploration' under supervision of professor Dr Supratik Pal, ISI Kolkata.

## Technical Skills

Programming & Tools: Python, R, Jupyter Notebook, Collab, VSCode, Excel, LaTeX.

Data & ML Libraries: Pandas, NumPy, SciPy, XGBoost TensorFlow, Keras. **LLM Frameworks**: Transformers, LangChain, LangGraph, HuggingFace.

Vector Stores & Al Orchestration: Chroma, Qdrant, n8n, CrewAl, Smolagents.

Visualisation: PowerBI, Matplotlib, Seaborn, Plotly. Deployment: Streamlit, Flask, AWS, Render, Replit.

Databases: MySQL, MongoDB.

## **Projects**

## RustgzxHelps - Telegram Al Bot | Aiogram, Groq API, Replit click

 RustgzxHelps is a Telegram bot built using Python and the Aiogram framework, integrated with the Grog API to access LLaMA 3 models, and deployed on Replit.

#### PDFIQ - Ask your PDF | RAG, QdrantDB, Streamlit click

· A PDF-based question-answering app that uses LangChain, Qdrant, and OpenAI to retrieve context-aware responses. Built with Streamlit for interactive querying and powered by LLM embeddings for semantic search.

#### Music Recommender (Lyrics Based) | Recommender system, NLP, Streamlit click

· Lyrics-based music recommendation app built with Streamlit, leveraging NLP to match songs by meaning.

#### Cancer Diagnosis using Medical Literature | Supervised, Ensemble Learning & Neural Networks. click

- Classifying the given genetic variations/mutations based on evidence from text-based clinical literature.
- Built a neural network model to classify genetic mutation types (0-9) using clinical text data, achieving 90.8% accuracy and outperforming traditional ML models by 15%.

#### Insights into P-value Behaviour under both the Null & Alternative hypotheses. | Hypothesis Testing, Statistical Analysis.

• In a continuous setup the distribution of P-value under alternatives depend on distributions of test statistic and generally it is skewed distribution unlike P-value under null hypotheses which follows Uniform [0,1].

# Training & Certifications

Introduction to Transformer-Based Natural Language Processing | NVIDIA click

Generative AI - Learn by doing | IIT Kharagpur (Ongoing) click

Data Analytics with Python | NPTEL (Top 2% among 10,000+ participants) click

## Academic Achievements

GATE STATISTICS '24 | Rank AIR 169 (91.02 percentile) click

TIMES SPARK SCHOLARSHIP (2019-20) & (2021-22) — Awarded for top performance after clearing competitive assessments.