

## CONTACT

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- Hooghly, West Bengal

## **EDUCATION**

2024-2026

#### **RKMVERI**

• M.Sc. Big Data Analytics

2021-2024 SERAMPORE COLLEGE, CU

B.Sc. Mathematics

## **SKILLS**

- Statistics
- Machine Learning
- Deep Learning
- Python, R
- Mathematics

## LANGUAGES

- English
- Bengali

# **AYAN BANERJEE**

**DATA ANALYST** 

## **PROFILE**

I am a highly motivated and detail-oriented Data Scientist with a strong academic foundation in Mathematics and Statistics, combined with hands-on expertise in Machine Learning and Deep Learning. My passion lies in transforming data into meaningful insights and intelligent systems that solve real-world problems.

With a deep curiosity for how things work beneath the surface, I constantly seek to understand algorithms from both mathematical and practical perspectives. I enjoy building predictive models, exploring neural networks, and working on AI-powered projects that make an impact.

Driven by continuous learning and a research-oriented mindset, I strive to blend theoretical depth with real-world applications in data science, aiming to contribute meaningfully to innovation in AI.

#### **PROJECTS**

- Movie Recommendation System with LightGCN
  - Built a GNN-based movie recommender using PyTorch Geometric.
  - Implemented BPR loss and normalized diffusion matrix on the MovieLens dataset.
  - · Compared GCN, GAT, and LightGCN
  - Github: Movie\_Recommendation\_System
- Music Source Separation using Enhanced U-Net
  - Trained an Enhanced U-Net model on MUSDB18 to isolate vocals from audio.
  - Used spectrogram transformation and augmentation in PyTorch.
  - Trained and evaluated on GPU for high performance.
  - Github: MusicSegmentation
- Bengali OCR
  - Used LeNet and ResNet models to recognize Bengali character.
  - Github: BengaliOCR
- Heart Disease Prediction
  - Used multiple ML algorithms for binary classification.
  - Github: <u>HeartDisease</u>