

TAPOJIT BHATTACHARJEE

M.Sc. in Big Data Analytics

Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math, West Bengal, India

@ tapojitbhattacharjee.tb.2020@gmail.com
tapojitbhattacharjee

tapojit-bhattacharjee-51ab99319

imtapojit

9073374287



PROJECTS

- **CleanVision using DIV2K** : Deep Learning based Real-Time Denoising, Inpainting and Restoration of Noisy Images (Computer Vision)
Keywords: OpenCV (cv2), PyTorch, TensorFlow, U-Net, DnCNN, Image Denoising, Image Inpainting, Gaussian Noise, Speckle Noise, Salt & Pepper Noise, PSNR, SSIM, Hyperparameter Sensitivity Analysis, Gradio, Real-Time Web Deployment
Jan.'25 - Apr.'25, RKMVERI
Faculty: Br. Bhaswarachaitanya
- **IPL Score Predictor**: A Deep Learning based approach on predicting the first innings score of an IPL match by merging ball-by-ball and matches dataset via uniqueID
Keywords: DL, IPL, Ball-by-Ball Data, Match Data, Data Merging via uniqueID, Feature Engineering, LSTM, GRU, Transformer, CNN-BiLSTM, Ensemble Model, MAE, RMSE, R^2 Score, Gradio, Web Deployment
Jan.'25 - Apr.'25, RKMVERI
Faculty: Dr. Soumitra Samanta
- **Table Question Answering (TQA) with LLMs**: Large Language Model-Based Natural Language Question Answering over Structured Tabular Data
Keywords: TQA, LLM, NLP, Tabular Data Understanding, SQL Generation, LangChain, PyMySQL, pandas, CSV/Database Integration, Prompt Engineering, Semantic Parsing, Text-to-SQL, Retrieval-Augmented Generation (RAG), Zero-shot Learning, Few-shot Prompting, Web Deployment, GPT-based Models
June'25 - Ongoing, RKMVERI
Faculty: Mr. Champak Dutta
- **Rainfall Prediction Analysis**: A typical ML project for predicting rainfall in a certain area using some factors
Keywords: Kaggle, Numpy, Colab, Pandas, Models implemented: Logistic Regression, Decision Tree, Random Forest, SVM, XG-Boost, KNN, Evaluation Metrics: Accuracy, Precision, Recall, F1 score, ROC-AUC, XG-Boost outperformed
Aug.'24 - Nov.'24, RKMVERI
Faculty: Br. Bhaswarachaitanya
- **Demographic Drift**: Modeling and Predicting Portugal's Population Trajectory
Keywords: Dataset (1950-2020), Trend, Curve Fitting, Population Forecast, Linear Trend, Quadratic Trend, Parabolic Trend, S-Curve, Exponential Curve, MAD, MSD, MAPE, Sex Ratio, %error, Prediction of 2050, MalevsFemale Population & Population Projection
March'23 - July'23, Asutosh College

COURSEWORK

- Deep Learning
- Computer Vision
- Artificial Intelligence
- Data Structures & Algorithms
- Time Series & Survival Analysis
- Machine Learning
- Natural Language Processing
- Advanced Statistics
- Java & Hadoop
- Econometrics & Finance
- Spectral Graph Theory
- Database Management System

ACHIEVEMENTS

- **INSPIRE Scholar** : Selected & awarded under Scholarship for Higher Education (SHE) Programme (*Sept'20 - Aug'23*)
- **HS Rank Holder** : Achieved 4th rank in South 24 Parganas & 14th in WB (*July'20*)
- **Madhyamik Rank Holder** : Achieved 1st rank in South 24 Parganas & 11th in WB (*June'18*)
- **Jahar Lal Chandra Merit Scholarship** : Awarded for securing the 1st position in South 24 Parganas in WBBSE result (*Mar'19*)
- **Britti Pariksha Rank Holder** : Achieved 1st rank in Kolkata (*Dec'11*)

EDUCATION

- **Ramakrishna Mission Vivekananda Educational and Research Institute, Howrah**
M.Sc. in Big Data Analytics
2024 – Present (Sem-1) CGPA: 6.39
- **Asutosh College Kolkata**
B.Sc.(Hons.) in Statistics
2020 – 2023 CGPA: 7.775
- **Sarada Vidyapith(H.S.)**
West Bengal Council of Higher Secondary Education (10+2)
2018 – 2020 Score: 97%
West Bengal Board of Secondary Education (10)
2012 – 2018 Score: 97%

TECHNICAL SKILLS

- **Programming Languages**: Python, Java, SQL, R, \LaTeX
- **Libraries & Frameworks**: PyTorch, OpenCV, TensorFlow, Hadoop, Matplotlib, Scikit-learn, Seaborn, PyMySQL, NumPy, Pandas
- **Tools, Platforms & Database**: Git/Github, Jupyter, Colab, VS Code, Tableau, Power BI, MySQL, Excel
- **Operating System**: Windows, Linux (Ubuntu)

ACTIVITY

- **Asutosh College**
 - Student Council Member [*Nov'21 - Aug'23*]
 - Volunteering, Organising sports, cultural events & coordinate with teachers on behalf of classmates [*Mar'22 - July'23*]
 - Unit Secretary [*May'22 - Aug'23*]
- **RKMVERI**
 - Fest Organiser, Core Committee Member **Perception 2025** Photography Team [*Jan'25*]
- **Problem Solver at HackerRank & Leetcode**
 - Solve Python & DSA Problems

CERTIFICATIONS

- **NPTEL** : Top 5% scorer in Joy of Computing using Python (**Elite Silver**) (*Aug'24 - Nov'24*)
- **Forage: Deloitte Australia** - Data Analytics Job Simulation (*May'25*), **Accenture North America** - Data Analytics & Visualization Job Simulation (*May'25*), **TATA** - Data Analytics Job Simulation (*June'25*)

HOBBY

- Cricket, Music, Photography, Philately, Quizzing, Recitation, Watching Movies, Travelling

