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Nilabjanayan Bera
Data Analyst

click here for linkedin
click here for github

I am pursuing M.Sc. in Big Data Analytics. I have balanced theoretical knowledge of statistics and optimization algorithms and good programming and problem solving skills. I am interested in time series analysis with the application of deep neural networks.

PROJECTS

Finance : Modelling and Prediction of Indian Stock market using relevant news data and other covariates   Nov 2021 – **Present**
Dr. Gopal Basak (Indian Statistical Insitute, Kolkata)
- This project involves collection of relevant news and other data (social media), building model, training them with a given set of stock market and news data and then testing with a different set of data.
- Here we will use the sentiments extracted from news and social media as covariates of our time series model and then will use deep learning methods to train the model.

Summer Internship : Machine Learning assisted examination of peripheral blood smear images   **July 2021 - Dec 2021** Present
Dr. Utpal Garain (Coordinator, Centre for Artificial Intelligence and Machine Learning, ISI Kolkata)
- To analyse the peripheral blood smear images I shall perform pre-processing step, nucleus segmentation, cell segmentation, feature extraction, feature selection and classification of the WBCs. I shall use a novel domain adaptation technique to make my model microscope invariant.

Time Series Analysis : Modelling daily stock returns with different GARCH models   **Oct 2021**
Dr. Sudipta Das (Assistant Professor,RKMVERI,Belur)
- I modelled the log returns of four different stocks with GARCH model and then compared them on the basis of the profits.

Optimization Algorithms : A comparative study of various Optimization Algorithms in Deep Neural Network   **Sep 2021**
Mrinmay Maharaj (PhD, Pennsylvania State University)
- I predicted if a customer of a bank is more likely to churn or not. Here I used deep neural network and tried different optimization algorithms to trend the model. Then I explained the cause of success and failures of different optimization algorithms.

Statistics : "Build your own vector map" with two way ANOVA model.   **July 2021**
Arindam Banerjee (Assistant Professor,RKMVERI,Belur) and Arnab Chakraborty (Assistant Professor, ISI,Kolkata)
- From several zoomed screenshots of google raster image of our university campus, we made our own general vector image using two way ANOVA model. Concepts I used : Linear Model, Image Stitching

Graduation Thesis : Simulation Study On Non-Parametric Test Statistics   **March 2020 — June 2020**
- I performed a simulation study on the non-parametric tests. I compared the performance of Sign Test, Wilcoxon Signed Rank Test, Wilcoxon Rank Sum Test and Median Test with the parametric approaches to deal with one sample and two sample location problems.

EDUCATION

Master of Science, Big Data Analytics, RKMVERI, GPA : 9.33/10.00 (till now)   **Present**
Bachelor of Science, Statistics, Ramakrishna Mission Resedential College(Autonomous),Narendrapur, GPA : 7.84/10   2016 — 2020
Higher Secondary, Science stream, WBCHSE, Ramakrishna Mission Vidyapith,Purulia, percentage : 91.6   **2016**
Secondary, WBBSE, BRKMAHS, percentage : 92.7   **2014**

ANALYTICS SKILLS

Machine Learning	●●●●○	**Deep Learning**	●●●●◐
Data Engineering	●●●●○	**Statistics**	●●●●◐
Optimization Algorithms	●●●◐○	**Data visualization**	●●●●◐
Computer Vision	●●●●◐	**Natural Language Processing**	●●●○○

PROGRAMMING LANGUAGES & DATABASES

Python	●●●●◐	**R Studio**	●●●●◐
SQL	●●●●○	**Neo4J**	●●●◐○
PySpark	●●●◐○	**C**	●●○○○

EXPERIENCES

- Summer Research Intern at Indian Statistical Institute
- Participated in **Kaggle Data Science Bowl - 2018;   Kaggle Titanic Challange - 2021**