



# Deepmalya Dutta

DATA SCIENCE STUDENT

## Contact

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Chennai, Tamil Nadu

## Skills

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**Tools:** Python, R, SQL, C, Command Line, Adobe Photoshop CC  
**Exposure to:** Scikit-learn, Keras, Numpy, Seaborn, Ggplot2, Pandas, Matplotlib, Stats, etc.

## Online Courses

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Kaggle Courses:  
Python, Pandas, Data Visualisation, Introduction to SQL

## Extras

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**Treasure Hunt**  
Winner of various treasure hunts across several fests  
2019 - 2022

**Student Volunteer**  
National Service Scheme  
2019 - 2022

## Hobbies

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Reading Novels  
Discussing Philosophy  
Drinking Coffee  
Table Tennis

## Profile

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Keenly interested in Statistical Analysis, Problem Solving, Machine Learning and their applications in real-world scenarios. A fast learner with a healthy background in mathematics and statistics who is eager to work on projects for companies and gain real-world experience.

## Education

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Chennai Mathematical Institute	Master of Science
Data Science, 2022 - Present	CGPA: N/A
Key Courses - Machine Learning, Data Structures, Visualization, RDBMS, Python, Probability and Stats	

St. Xavier's College, Kolkata	Bachelor of Science
Mathematics, 2019 - 2022	CGPA: 8.2/10.00
Key Courses - Analysis, Linear Algebra, Probability, Statistics, Topology, Calculus	

## Projects

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### Footwear Classification using MLP

December 2022 | [Link](#)

In this project, I have performed image classification of footwear using a multilayer perceptron model. The DataSet used in this project was obtained from Kaggle, Shoe vs Sandal vs Boot Image Dataset. It contains around 15,000 images with a resolution of 136x102 pixels in an RGB color model.

Initially, I implemented a model with 3 hidden layers and got over 94% accuracy. Finally, I tried a Randomized Search to find the best hyperparameters. With that, I got an accuracy of 95.77% on the test data.

### Financial Literacy of 18 to 35-year-olds

August 2022 - Ongoing | [Link](#)

In this project, we are discussing the financial literacy of 18 to 35-year-olds across India. Our goal is to analyze the data collected through a survey with different statistical tools and measure their financial literacy. We used the INFE toolkit to score the answers and finally implemented a machine learning model, a combination of logistic regression, and decision trees to predict and classify the user's financial literacy.

## Credit Card Customers

Chennai Mathematical Institute | October 2022 - November 2022 | [Link](#)

In this project, we explore the trend and usage of credit card users among different demographics. We use visualization techniques in R to find patterns in the credit card usage dataset. Following this, we attempt to find relations between Credit Card Usage, Utilization, Revolving Balance, and other variables. Finally, we develop an R-shiny dashboard to address the above-posed questions.

## Deterministic Epidemic Modelling - HIV/AIDS

St. Xavier's College, Kolkata | Sep 2021 - Dec 2021 | [Link](#)

In this paper, we have discussed SIS, SIR, SEIR, and SIRS model and analyzed the critical mechanics behind each model and how they correlate with real-world epidemics. Finally, we made estimates of potential outbreak casualties for new initial conditions and modern outbreak controls.

## *Positions of Responsibility*

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- **Placement Coordinator**, Chennai Mathematical Institute, '24
  - **Organizing Committee**, Analytica '21  
St. Xavier's College, Kolkata, Graphics Designing
  - **PR Team**, Analytica '19, St. Xavier's College, Kolkata  
PR Representative
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