

# Sourav Mandal *Business Analyst*

📍 Vill.:Rajbagan, P.O.: Chakdaha, Dist.: Nadia, State: West Bengal, Pin: 741222 ✉ mandal.srv1998@gmail.com

☎ +91 7908790565 📅 27/11/1998 🇮🇳 Indian in sourav-mandal-390064210 🔄 Sourav9827 📁 Portfolio



## 👤 Profile

A highly motivated and detail-oriented Business Analyst with experience in data analysis, data visualization, and data management. Skilled in SQL, Python, Excel, and Power BI. Strong analytical and problem-solving skills, with the ability to extract insights from complex data sets.

Proven track record of delivering high-quality work under tight deadlines. A quick learner and team player who is always willing to go the extra mile to ensure project success.

## 🧠 Skills

**Teaching** (*Mathematics and Computer Science*)

**Computer Science** (*Python, SQL, Machine Learning and Data Science*)

**Python** (*Pandas, Numpy, Matplotlib, Seaborn, Flask, Plotly, Dash, Sklearn etc.*)

**Data Analytics** (*MySql, Tableau, PowerBI, Snowflake, Pentaho etc.*)

**Databases** (*SQL and Mongo DB.*)

**MS-Office** (*Advanced Excel, Power point, Word, Access.*)

**Team Leader** (*I lead a group of interns under me, monitor their work and as a team we solve various task in Highway Delite.*)

**Machine Learning** (*Linear and Logistic Regression, SVM, Xgboost, Random Forest, Naive Bayes etc.*)

**Deep learning** (*ANN, CNN and RNN*)

**NLP** (*NLTK, Machine Learning, RNN, LSTM, GRU, Self-Attention model, Transforms, Chatbot etc.*)

## 📄 Certificates

**Data Analytics Consulting Virtual Internship(KPMG)**  
(*Data Quality Assessment Data Insights Data Insights and Presentation May 8th, 2021*)

**Data@ANZ Program** (*Exploratory Data Analysis Predictive Analytics May 13th, 2021*)

**Full Stack Data Science** (*ineuron.ai*)

**Python for Data Science and Machine Learning Bootcamp**  
(*udemy*)

**Introduction to Machine Learning** (*Coursera*)

**Data Science foundations** (*Great Learning*)

## 🎓 Education

**Full Stack Data Science program, ineuron.ai** 🌐

03/2022 – 03/2023

Data Science and Analytics, Machine Learning, Deep Learning and Big data basics.

**Diploma in Information Technology,**  
*Nehru Yuva Computer Shiksha Kendra*

02/2021 – 02/2022 | Chakdaha, India

Typing, MS Office, Advanced Excel, HTML, CSS and Basic C Programming.

## 📁 Professional Experience

**Subject Matter Expert, Vertocity**

03/2023 – present | Remote, India

Training students on Data Science and Analytics

*SQL, Advanced Excel, Python, Statistics, Machine Learning, Power BI, Time series analysis, Deep Learning and NLP.*

**Data Analytics intern, ineuron.ai** 🌐

05/2023 – 07/2023 | Remote, India

- **Project Title:** NBA Data Analytics Project
- **Tools:** Python, SQL and Power BI
- **Final Output:** A presentation of the findings, including visualizations and recommendations.
- **Roles and Responsibilities:**
  - Collected (Webscraping) and cleaned NBA player data.
  - Developed and executed data analysis queries.
  - Created visualizations of the data.
  - Presented the findings and documentations to stakeholders.

**Data Science Intern, ineuron.ai** 🌐

12/2022 – 02/2023 | Remote, India

- **Project Title:** News Article sorting
- **Objective:** To classify news articles into predefined categories like Sports, Technology, Entertainment, etc. using deep learning methods.
- **Tools:** Python, Google's BERT model, Azure App Services, Flask, HTML/CSS, Pandas, NumPy, Scikit-learn, TensorFlow, and Keras.
- **Final Output:** Achieved 97.96% accuracy on test set, deployed model on Azure App Services using Flask web app for predictions
- **Roles & responsibilities:**
  - Pre-processing the data to make it suitable for the model
  - Fine-tuning the BERT model for News Category Classification
  - Developing the Flask application for the model
  - Deploying the model on Azure app services
  - Testing and debugging the application
  - Documentation of the project

**Teacher(Mathematics and CS), Self Employed**

2017 – present | Chakdaha, India

- Freelancing Teacher of Mathematics and Computer Science
- Creating Presentations and Learning designs for everyday classes.
- Good understanding of Concepts and Application in real life situations.
- Noticeable improvements in Student's Academic results.

**Associate, Highway Delite**

02/2022 – 11/2022 | Remote, India

- Building database for highway related data.
- Train and monitor the work of new interns.
- Research and create documents for tourism data
- Verify and upload the highway information in the backend of the website

**Data Analyst Intern, The Sparks Foundation**

08/2021 – 09/2021 | Remote, India

- Prediction using Supervised ML
- Prediction using Unsupervised ML
- Exploratory Data Analysis - Retail
- Exploratory Data Analysis - Terrorism
- Prediction using Decision Tree Algorithm

## Bachelor in Education (B.Ed), W.B.U.T.T.E.P.A

09/2021 – 09/2023 | Santipur, India

On-site School Teaching Internship, Seminars, Micro-teaching, Presentations, Models, Learning Designs etc.

## M.Sc Mathematics(Pure), University Of Kalyani

08/2019 – 08/2021 | Kalyani, India

- Specialization in Complex Analysis and Differential Geometry.
- Advanced Research Project on Wave Equations.

## B.Sc (Hons.) Mathematics, University Of Kalyani

07/2016 – 07/2019 | Kalyani, India

## Courses

### Associate Financial Analysis, invact.com

06/2023 – present

### Prompt Engineering, deeplearning.ai

04/2023 – 04/2023

### Introduction to R Software, NPTEL

09/2020 – 11/2022

### Learning Analytics Tools, NPTEL

07/2021 – 10/2021

### Probability for Computer Science, NPTEL

07/2021 – 10/2021

### Introduction to Machine Learning, NPTEL

07/2021 – 09/2021

### Data Analytics with Python, NPTEL

01/2021 – 04/2021

### Data Science for Engineers, NPTEL

01/2021 – 03/2021

### Programming, Data Structures And Algorithms Using Python, NPTEL

09/2020 – 11/2020

### Introduction to R Software, NPTEL

09/2020 – 11/2020

### Python for Data Science, NPTEL

09/2020 – 10/2020

## Languages


English • Hindi • Bengali

## Declaration


I hereby declare that all the information furnished above is correct to the best of my belief. I am responsible for the authenticity of all the information.

Sourav Mandal  
Chakdaha, 29/07/2023


## Projects

**Earthquake Analysis**, Created Earthquake Analysis Dashboard, predicted risk & intensity, improved disaster response. 


- **Objective:** Analyze earthquake data and create a predictive model for earthquake risk and intensity.
- **Tools:** SparkR, Power BI.
- **Methodology:** Created an ETL pipeline using SparkR to ingest and clean data. Built a machine learning model to predict earthquake risk and intensity. Visualized the results using Power BI.
- **Results:** Provided insights into the earthquake patterns, hotspots, and trends. Predicted the countries at risk for earthquakes and their intensity levels.
- **Impact:** Improved disaster preparedness, risk mitigation, and emergency response strategies for the affected regions.

**HR Attrition Dashboard**, Excel-based HR dashboard improved employee retention and engagement. 

- **Objective:** Create a dashboard to analyze employee attrition and provide insights for HR decisions.
- **Tools:** Excel, Power Query, DAX.
- **Methodology:** Extracted and transformed employee data from multiple sources, created calculated columns and measures, and designed interactive visuals.
- **Results:** Provided insights into attrition rates, reasons, and patterns, leading to data-driven decisions.
- **Impact:** Improved employee retention, engagement, and satisfaction for the company.


**Adidas Sales Dashboard**, Created a sales dashboard using Excel, Power Query, and DAX to analyze sales trends, improve forecasting, and marketing strategies for Adidas. 

- **Objective:** Create a sales dashboard for Adidas to visualize and analyze sales data.
- **Tools:** Excel, Power Query, DAX.
- **Methodology:** Extracted and transformed data from multiple sources, created calculated columns and measures, and designed interactive visuals.
- **Results:** Provided insights into sales trends, product performance, and customer behavior, leading to data-driven decisions.
- **Impact:** Improved sales forecasting, inventory management, and marketing strategies for Adidas.

**Insurance Fraud Detection**, Develop and implement a fraud detection system for an insurance company. 

07/2022 – 08/2022

- **Problem Statement/Objective:** To develop a machine learning model that can accurately detect fraud in insurance claims to minimize losses and improve claim processing efficiency.
- **Tools:** Python, Jupyter Notebook, Scikit-learn, Pandas, NumPy, Flask, Heroku, HTML/CSS.
- **Final Output:**
  - A machine learning model with accuracy of 77.2% in detecting fraudulent claims that can predict the likelihood of a claim being fraudulent based on various features such as claim amount, policy holder history, and claim type.
  - The model was deployed on Heroku as a web application that can be used to submit insurance claims and receive an instant fraud prediction.
- **Roles & Responsibilities:** Sole developer and project manager. Conducted data analysis and preprocessing, trained and evaluated machine learning models, and deployed the final model on Heroku.

**Customer Details Dashboard**, Excel-based customer dashboard provided insights and improved business performance. 

- **Objective:** Create a dashboard to analyze customer data and provide insights for business decisions.
- **Tools:** Excel, Power Query, DAX.
- **Methodology:** Extracted and transformed customer data from multiple sources, created calculated columns and measures, and designed interactive visuals.
- **Results:** Provided insights into customer demographics, behaviors, and preferences, leading to data-driven decisions.
- **Impact:** Improved customer retention, acquisition, and satisfaction for the business.