

# Sourav Mandal *SQL Developer*

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



## 👤 Profile

Experienced mathematics and data science professional with expertise in Python, SQL, machine learning, and data analysis. Strong background in teaching and training, with a proven track record in developing and deploying models for classification and prediction. Detail-oriented and committed to delivering high-quality results.

## 🧠 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

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

09/2021 – present | 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

## 📁 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(Webscrapping) 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

## 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.

## 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

### Tweets Sentiment Analysis,

*Data analysis and machine learning using Python and NLTK* 

10/2022 – 11/2022


- **Objective:** Analyze the sentiment of tweets and classify them as positive, negative, or neutral using machine learning
- **Tools:** Python, Scikit-Learn, SciPy, NLTK, Pandas, Heroku, Falsk, HTML/CSS.
- **Final Output:** Achieved 85% accuracy on test set, deployed model on Heroku as a web app for predictions
- **Roles & responsibilities:** Sole contributor, responsible for all aspects of the project including data collection, preprocessing, model training, and deployment. Managed the entire project from start to finish.

### Case Study SQL - Danny's Diner,



*Analyse Danny's Restaurant's Database*

- **Objective:** Analyzing Danny's Diner's data using SQL to help improve customer experience and make informed business decisions.
- **Tools:** SQL, Google Sheets (datasets provided)
- **Methodology:** Write SQL queries to answer specific questions about customer spending, visiting patterns, menu preferences, loyalty program, and points calculation. Create basic data tables for easy data inspection without SQL joins.
- **Results:** Insights generated on customer spending, visiting patterns, and menu preferences. Evaluation of loyalty program effectiveness. Calculation of points earned by customers.
- **Impact:** Enable Danny to understand customer behavior, enhance personalized experiences, expand the loyalty program, and optimize menu offerings based on customer preferences.

### Review and Image Scrappers,

*Flipkart Review Scrapper and google image scrapping* 

03/2022 – 04/2022


- Developed a Python script to scrape product reviews from Flipkart and images from website (<https://github.com/Sourav9827/Image-Scrapper.git> )
- Developed a Python script to scrape images from google search. (<https://github.com/Sourav9827/ReviewScrapperFlipkart.git> )
- Utilized the BeautifulSoup library to parse HTML and extract relevant data
- Stored the data in a sqlite database and used the Pillow library to process and resize the images

### 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.

### 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.