Sourav Mandal *Python Developer*

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

Results-oriented Python Developer with expertise in data analytics, machine learning, and full-stack development. Proven leadership in training and guiding teams. Proficient in cloud services, MLOps, and deploying robust solutions. Strong foundation in computer science and a track record of successful projects.

Skills

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

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

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

Deep learning (*ANN, CNN and RNN*)

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

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

Databases (*SQL and Mongo DB.*)

Big Data (*PySpark, Hadoop, Kafka and Spark*)

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

MLOps (*Github Action, CI/CD pipelines, Deployment Techniques In AWS,AZURE, Dockers And Kubernetes, MLflow, DVC.*)

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

Cloud Services (*AWS, Azure, Heroku, Render etc.*)

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

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

Data Science SME, *Vertocity*
03/2023 – present | Remote, India

Creating Dasboards, Generating Insights and Automation.
Providing Training 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

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 – 12/2023

TensorFlow Developer Certificate: Zero to Mastery, *Udemy*

08/2023 – 12/2023

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, 31/12/2023

📁 Projects

Puppy adoption site, *Designed and developed a web application using the Flask framework in Python to allow users to browse and adopt puppies* 🔗

- Created a full-featured web application that allows users to browse and adopt puppies, including a form for submitting adoption applications
- Implemented a form for users to submit applications to adopt a puppy, including validation and error handling
- Stored the application data in a MySQL database and used Flask-SQLAlchemy to query and manipulate the data
- Utilized Jinja templates to create dynamic web pages and integrated Bootstrap for a responsive design
- Successfully deployed the app on Heroku, making it accessible to users around the world.

Review and Image Scrappers,
Flipkart Review Scrapper and google image scrapping 🔗

- 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 Beautiful Soup 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

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

- **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.
  -

Analysis Of Wave Equations,
Investigating Wave Behavior and Mathematical Modeling

03/2021 – 07/2021

- Investigated the fundamental concepts and mathematical formulations of wave equations.
- Investigated the effects of nonlinearities and boundary conditions on wave behavior.
- Presented the findings through comprehensive reports, visualizations, and presentations.

Calefornia House Price Estimation, *Predictive Modeling for California Housing Prices: Harnessing Data for Accurate Price Projections.* 🔗

- **Objective:** Develop a predictive model for California house prices using machine learning.
- **Tools:** Employed Python, Pandas, Scikit-Learn, XGBoost for data analysis and modeling, Github actions and Heroku.
- **Methodology:**
  - Implemented regression models, feature engineering, and hyperparameter tuning.
  - Led data pipeline creation & model deployment for real-world application.
- **Results and Impact:** Achieved a robust model with 92% accuracy, aiding in informed real estate decisions and enhancing market understanding.