SOURAV MUKHERJEE

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PERSONAL DETAILS

- **FATHER NAME:** Bhaskar Mukherjee
- **D.O.B (DD/MM/YYYY):** 01-11-1999
- **PERMANENT ADDRESS:** 11, Ghosh Para lane, Hooghly, West Bengal, India,712245.
- **SEX:** MALE

EDUCATION

Heritage Institute of Technology, Kolkata **09/2021 – 06/2024**
Btech in Electronics & Communication Engineering - ***CGPA - 7.89*** *Kolkata, West Bengal*

Ramakrishna Mission Shilpamandira, Belur Math **05/2018 – 06/2021**
Diploma in Electronics & Telecommunication Engineering - ***Percentage - 85.2%*** *Howrah, West Bengal*

Uttarpara GOVT High School **03/2016 – 04/2018**
(WBCHSE)XII - ***Percentage - 63%*** *Hooghly, West Bengal*

COURSEWORK / SKILLS

- Machine learning
- Electronics Devices
- Artificial Intelligence
- Microsoft Office 365
- Communication
- Web Development
- OOPS Concept
- Data Science

PROJECTS

Path Loss Prediction Model | Machine learning, Python,MS-Excel,IDE-VS code **04/2024**

- In 5G and similar **high-frequency communication**, signal power emerges as a critical factor. If the signal power vary according to the traffic generation it can **save a significant amount of cost for signals transmission**.
- Collected data from the Wallfish Ikigami model, including 6 parameters from Qualnet simulator, to create a CSV file consisting of **12,000 data points**. Split the data, allocating **80% for training** and **20% for testing** the model.
- Trained the base model using **Decision Tree Regressor, Gradient Boosting, Random Forest Regressor, and KNN Regressor models**. Employed **Linear Regression** as the **final estimator** to create a **stacked regression model** for predicting path loss.
- Evaluated model against individual models and discovered that the trained model outperformed them. Trained model Mean Squared Error **(MSE) is 0.818696**, Mean Absolute Error **(MAE) is 0.547446**, and Root Mean Squared Error **(RMSE) is 0.904818**.

Movie-Lens 20M Dataset Analysis | Python,Pandas,MS-Excel, IDE-VS code **07/2023**

- Conducted comprehensive analysis of Movie-Lens **20M dataset** to extract insights on **movie ratings, genres, and user behavior**.Demonstrated proficiency in handling data, identifying trends, and providing actionable insights for informed **decision-making**.
- Utilized **Python and pandas library for data analysis**, encompassing tasks from data collection to visualization. Presented key findings and **recommendations based on dataset patterns** and **genre-specific movie analysis**.

HOME AUTOMATION USING 8051 | 8051uc, Bluetooth module HC-05 **02/2021**

- Revolutionize home with the cutting-edge **8051 Microcontroller** based project for home automation, powered by **HC-05** technology. Seamlessly control the home appliances with just a tap, **bringing convenience and efficiency to fingertips**.

INTERNSHIP

Campalin Innovation private Limited **06/2023 – 07/2023**
Bengaluru, Karnataka

- Internship in **Machine learning with Python** in association with Campalin from

TECHNICAL SKILLS

Languages: Python, Java, C++
Developer Tools: VS Code, MS Excel, Jupyter notebook, Goggle Collab, Intellij Idea, QualNet Simulator

PUBLICATION

Analysis of High Frequency Uplink Downlink Channel Parameter with Various K Factor | February 2024 | IJIRT | Volume 10 Issue 9 | ISSN: 2349-6002 | Paper link

CERTIFICATIONS

- **Python** for **Data Science, AI** & **Development**- Coursera
- **Core Java** - Coursera
- Technical Support Fundamentals- Coursera
- Leadership Skills - Coursera