

SOURAV MUKHERJEE

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LinkedIn

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 - 8.08 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

Uttarpara Children's Own Home 2016
(WBBSE)X - Percentage - 80% Hooghly, West Bengal

COURSEWORK / SKILLS

- Machine learning
- Electronics Devices
- Artificial Intelligence
- Microsoft Office 365
- Communication
- Web Development
- OOPS Concept
- My SQL

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++, My SQL

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 [↗](#)