

2017 - 2022

Class Xth 2013 - 2014
CBSE | CGPA – 8.8

Technical Skills

- **Coding Languages:** Java | Python | C++ | R | JavaScript | HTML | CSS
- **Framework:** Flask (Python)
- **Databases:** MySQL | SQL Server | RDBMS
- **Development tools:** Eclipse | PyCharm | Notepad++ | Jupyter Notebook | Visual Studio Code
- **Misc:** Git | Shell | NUnit | Selenium | Pytest
- Object Oriented Programming | Data Structures and Algorithm | Operating Systems.

Experience

MBB Labs Pvt Ltd. - Risk Performance and Quantitative Analytics - Product Engineer

Jul'22-Dec'22

- **Mortgage Analysis Dashboard Development**
 - Created a Mortgage Analysis Dashboard utilizing Oracle SQL for data retrieval and R/Python for visualization.
 - Designed an interactive user interface with graphs, maps, and tables to visualize mortgage metrics.
 - Collaborated with cross-functional teams, gathered feedback, and optimized query response times.
 - Automated data updates for real-time information, enhancing data security.
 - Ensured robust access controls and encryption measures for data integrity.
- **Technologies** – Python, R, R Shiny, Oracle SQL, Agile development process.

Viacom 18 Media Pvt Ltd. - Corporate Strategy and Data Science - Data Scientist

Jan'22-Jun'22

- **Project 1: TV Channel Ad Break Scheduling and Optimization**
 - Utilized Enhanced Machine Learning (ML) models to accurately predict retention, viewership, and market share variables to schedule and optimize advertisement block for 6 different channels.
 - Employed advanced algorithms such as XGBoost, LightGBM, Random Forest, and Logistic Regression to make strategic scheduling decisions.
 - Incorporated more than 40 features to enhance ad break scheduling accuracy.
 - Leveraged non-advertisement time slots to maximize market share, providing a competitive edge.
 - Achieved prediction accuracy within the range of 76% to 85%.
- **Project 2: Advertisement Demand Prediction**
 - Enhanced prediction accuracy with an advanced algorithm, Light GBM, achieving an outstanding 93.3% accuracy.
 - Significantly outperformed the baseline accuracy of 74.4% obtained using Random Forest Regression.
 - Employed Random Search and Grid Search techniques to fine-tune hyperparameters, optimizing the predictive model.
 - Utilized the BARC Database for accessing and filtering crucial data, ensuring the integrity and quality of the datasets.
- **Technologies** – Python, R, Machine Learning, NumPy, Pandas, BARC Database, Data Cleaning, and filtering.

CSIR – National Metallurgical Laboratory - Design and Analysis of Experiments - Research Analyst

May'19 – Jul'19

- Explored novel 'collector' properties of waste cake-derived sesame oil as a potential diesel substitute.
- Applied factorial design to study three parameters and their second-order interactions across four collector-frother combinations.
- Optimized the model by reducing Mean Square Error (MSE) through the elimination of less critical parameters.
- Validated research findings using hypothesis testing with p-value analysis.
- Achieved a remarkable 97% accuracy with a meticulously crafted Multiple Regression Mathematical Model.
- **Technologies** – Minitab® 19, Hypothesis Testing, Applied Statistical Methods.

Projects

RevitalizeMe – Your Path to a Healthier Lifestyle: Health and Fitness related Website

Feb'23 – Apr'23

- Conceptualized and developed "RevitalizeMe," an all-encompassing website with user login and registration options.
- Included Basal Metabolic Rate (BMR) calculator and daily macronutrient requirement estimator on the basis of your lifestyle.
- Designed and integrated a comprehensive calorie and nutrient tracker, encompassing both macro and micro nutrients.
- Curated a vast collection of 1000+ healthy recipes, providing users with a diverse range of course and dietary choices.
- Developed informative pages dedicated to educating users about lifestyle disorders and their management.
- **Technologies** – Python, HTML, CSS, JavaScript, MySQL, Web Scraping, Flask, Web Development, API Integration.
- **Website live on:** [RevitalizeMe](https://revitalizeme.onrender.com) (<https://revitalizeme.onrender.com>)

Portfolio Website

Jan'22

- Created a comprehensive portfolio website to showcase my work, skills, projects, publication, and accomplishments emphasizing my proficiency in web development.
- Technologies – HTML, CSS, JavaScript.

Publication

A Review on Flotation Techniques and Reagents used in Graphite Beneficiation.

Mar'23

- Coauthor in a review paper published in International Journal of Chemical Engineering - [Link to full access](#).

Extracurricular Activities & Position of Responsibility

- Hold a bachelors' degree in Classical Music (Vocal) in 2016 from the renowned University – Prayag Samiti, Allahabad.
- Core Team Member - Grub Coordinator - Managed team of 90 members for the Annual food festival attended by 750 people.
- Love playing chess and badminton, swimming, sketching, making creative arts and singing.

Volunteer Experience – NSS, BITS Pilani

- Taught underprivileged students of Pilani for the Joint Entrance Examination(JEE) to class XI and class XII grade students.