Harikesh Kushwaha

Location: New Delhi, Delhi

[LinkedIn](#) | [Portfolio](#) | [GitHub](#) | [Kaggle](#)   Email: harikeshkumar0926@gmail.com | Mobile: +919838422934

TECHNICAL SKILLS

Languages	: Python, C++, SQL
Libraries	: Matplotlib, Pandas, NumPy, Seaborn, scikit-learn, Tensorflow, Pytorch, Statsmodels
Databases	: MySQL, MongoDB
Dev Tools	: Linux, VS Code, Tableau, Git, GitHub, Jupyter Notebook, AWS, S3
Soft Skills	: Analytical and Problem-Solving Skills, Good Presentation Skills, Communication skills

EDUCATION

Indian Institute of Technology Delhi   New Delhi, India
Master of Science in Physics, (8.6 GPA)   *July 2021 – May 2023*

Banaras Hindu University   Varanasi, Uttar Pradesh India
Bachelor of Science in Physics, (8.4 GPA)   *July 2018 – May 2021*

PROJECTS

optionalyzer   *Python, options, futures, plotly, BS model*   [Source Code](#)

- Developed **optionalyzer**, a powerful **Python library** for **Options Strategy Builder** that makes it easy to create custom options trading strategies.
- Implemented the **Black-Scholes Model** to accurately calculate **Option prices** and utilized **optimization** techniques to find the **implied volatility** of the Option, enabling users to make better trading decisions.
- Leveraged **Plotly** to create an **interactive Options payoff diagram** for any date, allowing users to explore potential outcomes for different combinations of Options.

IBM Data Analytics Capstone Project   *Python, pandas, Matplotlib, Web Scraping, API, Dashboard*

- Gathered and analyzed data from various sources, including **API** and **web scraping**. Conducted **exploratory data analysis** and **wrangling** to prepare the data for further analysis.
- Built a **dynamic dashboard** to extract valuable insights from the collected data, and effectively **communicated** the findings to others through an **engaging presentation**.

House Prices Prediction   *Python, pandas, scikit-learn, kaggle, Matplotlib, Seaborn*   [Source Code](#)

- Analyzed over **80** features to predict house prices using machine learning.
- Performed **Exploratory Data Analysis** and **feature engineering** to get insight from data.
- Trained **multiple models** using scikit-learn and selected the best one by applying **grid search** and **cross-validation**. Used ensemble of the top performing models to achieve a **top 10%** ranking on Kaggle.

Tableau Dashboards   *Tableau, Web Scraping, Web API, BeautifulSoup*   [Music](#) [Books](#)

- Created an interactive **Tableau viz** showcasing my **Spotify streaming history** over several years, using **data blending** and **calculated fields** to present key insights.
- Utilized **web scraping** techniques to extract my book reading history from **Goodreads** and created an interactive **Tableau** dashboard to analyze and visualize the data.

CERTIFICATIONS

- Financial Markets (Yale University) [Certificate](#)

- Machine Learning Specialization (DeepLearning.AI) [Certificate](#)

- IBM Data Analyst Capstone Project (IBM) [Certificate](#)