
Vishal Kumar Sharma

Senior Data Analyst Modeller @ Equipped Analytical Intelligence

Sector 22, Noida, Uttar Pradesh (201301)

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LinkedIn: [linkedin.com/in/vishalsharma3003/](https://www.linkedin.com/in/vishalsharma3003/) | GitHub: <http://github.com/vishalsharma3003/> |

Stackoverflow: <https://stackoverflow.com/users/12262111/vishal-sharma>

Highly analytical and process-oriented scientist, strategist, and technical community builder with 7 years of cross-industry experience and significant experience in Analytics, Machine learning, Predictive Modeling, Classification Models, data visualizations, Exploratory data analysis, and other data science activities. Highly skilled in R Programming, Linear Regression, Statistics, intermediate skills in Python and a master's degree in Data Science from BITS, Pilani. Working Experience of FORTUNE 500 company. Passionate about integrating statistical and computation methods into digital products to drive business value. I am a driven leader with interdisciplinary, technical background, combining academic curiosity with industry best practices. I greatly value mentorship, collaborative team building, creative solutioning, transparency, and personal growth. Pursuing Ph.D. in Computer Science and Engineering from Amity University, Noida.

CORE EXPERTISE

- Machine Learning Modeling Techniques – Classification and Regression models (Linear Regression, Logistic Regression, Clustering, SVM, k-NN Algorithm, Neural Networks)
- Statistical programming language: R Programming, Python
- Dashboard development using R Shiny, Tableau, and Power BI
- Visualization Tools: D3.js, ggplot, Plotly, highchartr
- Proficient in Data mining activities
- Shell Scripting, R scripting and Python scripting for automating various processes
- Domain Exposure: Banking, Real Estate, Manufacturing
- Attribute information Analysis
- Worked on various Data Analytics use cases from Kaggle.com
- NLP techniques namely Bag of Words, TF-IDF, TF-IDF-CF, POS-Tagging and word embedding etc.
- Latex for Markdown, bubbles.io, Zapier Automation, GitHub, HTML, CSS, JS, Azure Devops
- RStudio Connect, Shinyapps server, R Studio Community, R Presentation, Development of R Packages

TECHNICAL EXPERTISE

Programming Language	R Programming, Python, HTML, CSS, JavaScript, LaTeX, VBA, SQL, Java, Shell Scripting
Operating System	Windows 10, Windows 7, UNIX
Database Tools	SQL Server 2012, MS Access, Oracle SQL Developer, TORA

Tools	R Studio, Jupyter Notebook, Visual Studio Code, D3.js, Plotly, WEKA, MS Excel, Zapier, Amazon AWS, Tableau, Power BI, Power Automate, Google Colab
Key Skills	Machine Learning, Data visualization, Exploratory Data Analysis, Modeling, Information Retrieval

EDUCATION

Ph.D. (2021-2025)

College : Amity University, Noida
Stream : Computer Science Engineering
Thesis Title : **Detecting DeepFake Videos Based on Spatio-temporal Features & Audio-Visual Modalities Using Artificial Intelligence**

Masters (2017-2020)

College : Birla Institute of Technology and Science, Pilani (BITS, Pilani)
Stream : Software Systems (Specialization in Data Science)
Overall CGPA : **8.47**

Bachelors (2011-2015)

College : Inderprastha Engineering College, Ghaziabad
Stream : Computer Science And Engineering
Overall Percentage : **72.9%**

EXPERIENCE

Senior Data Analyst Modeller (Jul'21 - till date)

Organization: Equipped Analytical Intelligence (<https://www.equipped.ai/>)

Project: Portfolio Pricing | **Domain:** Data Science | **R Programming**

Client – Amitra Capital, Anacap Financial Partners, Veld Capital

Roles and Responsibilities:

- Pricing prospective investment opportunities and existing investments
- Performing loans, Non-performing loans, and securitisation pricing
- Identify the probability of default along with future collections and prepayments in loans
- Create models to identify the best price to purchase the portfolio
- Preparation of risk and return analysis in Investment Review Committee (IRC) document
- Multiple successful portfolio purchased with a maximum of £150 million

Project: Dashboard Optimization | **Domain:** Data Science | **Tableau, R Programming**

Client – Multiple

Roles and Responsibilities:

- Convert the R Shiny Dashboards to Tableau dashboards
- Lead a team of three analysts for the migration
- Optimization of the existing R Shiny Dashboards using advanced R Concepts
- Accelerate the performance of BAUs
- Adding or Creating Dimensions, Measures and Calculations as required
- Calculation of the Underwritten and the forecasting numbers

Project: Delivery Engine | Domain: Data Science | R Programming

Client – Internal

Roles and Responsibilities:

- Develop a natural language system to predict the potential standardized value for a new categorical value found in the data warehouse
- Create a pipeline for one-click automation of Quality Checks and workflow efficiencies
- Create functions for the automation of certain activities performed by the team (Report Generation & QA)
- Create an algorithm for rationalization of code across teams
- Create data standardization mapping using NLP

Project: Equipped Library | Domain: Data Science | R Programming & Python

Client – Internal

Roles and Responsibilities:

- Create and end to end R library from scratch
- Create functions supporting Performing and Non-Performing Loans
- Utility functions for the entire organization
- Contribute in the analytical concepts implemented in the deals
- Support team for technical stuff
- Conduct Internal trainings to teach the team R concepts
- Implement analytical concepts like Markov Chains in R
- Create models for predicting the strength of the portfolio
- Create data standardization mapping using NLP

Data Scientist (Jan'20 - Jun'21)

Organization: CBRE (<https://www.cbre.com/>)

Project: Portfolio Transformation Calculator | Domain: Real Estate

Client – Multiple Clients

Link: <https://vantage-delivered.com/calculator/index.html>

Roles and Responsibilities:

- Predict potential savings due to reduced staff during COVID-19
- Provide the flexibility to connect to various products based on the space calculation
- Build best-in-class dashboard for multiple stakeholders
- Plot the complete output before and after COVID-19 and predict the expected reduction in cost
- Enable sharing functionality for sharing the scenario to other users

Project: EDA Automation | Domain: Data Science

Client – Internal Tool

Roles and Responsibilities:

- Automate the generation of EDA Document so that anyone can run it
- Creating and regular updates in conditional library
- Resolve queries raised by stakeholders in conditions or graphs
- Contribute into the documentation of the process so as to assist to various team members

Project: CBRE Pathfinder | Domain: Real Estate

Client – Internal Tool

Link: https://cbre-client-solutions.shinyapps.io/Pathfinder_UI/_w_43db1e55/

Roles and Responsibilities:

- Dashboard for executing and fetching results from various models/algorithms defined by CBRE experts
- Implement supervised learning methods to assist in the property management decisions for the clients
- The models created in Python and accessed using APIs in R
- Flask app runs on AWS and then APIs are hit using R to get the results after the execution of algorithm
- Flexibility to choose and run selected algorithms, download the results and save it
- Leveraging the output of the model to create the dashboards in Tableau

Project: Client Portfolio Dashboard | Domain: Real Estate

Client – Multiple Clients

Roles and Responsibilities:

- Create portfolio dashboard for various fortune 500 clients.
- Build best-in-class dashboard for multiple stakeholders
- Notification for the expiration of lease coming soon
- Graphs representing the area wise leases, owned or subleased properties
- Portfolio representing total area, total annual rent and operating expenses shown in the dashboard
- Maps showing the location of every office
- Resolving any data or performance issues related to workbooks and data sources
- Coordinating with Tableau Admin Team for Production Deployment

Project: CBRE Dimensions | Domain: Data Science

Client – Multiple Clients

Link: <https://maps.cbre.com/GC17>

Roles and Responsibilities:

- CBRE's Location Intelligence System
- On the basis of city names, location name, etc., identify the complete address with location intelligence
- Find the latitude longitude using the location attributes using google maps API
- Flexibility to map user variables with the standard variables so as to assist in location findings

Project: Portfolio Sites | Domain: Real Estate

Client – Apergy

Link: https://cbre-client-solutions.shinyapps.io/Apergy/_w_0e26f17b/

Roles and Responsibilities:

- Dashboard to present the various types of sites/locations
- Information regarding the sites for example size, annual rent, workforce, etc.

- Filtering of locations on the basis of various factors

Project: COVID-19 Datasets | Domain: Web Scrapping

Client – Internal

Link: <https://rpubs.com/vishalsharma3003/covid-19-datasets>

Roles and Responsibilities:

- Web scrapping for COVID-19 Datasets
- Research and gather various COVID-19 datasets for further use

Project: COVID-19 Dashboard | Domain: Data Science

Client – Learning

Link: <https://vishalsharma.shinyapps.io/COVID-19/>

Roles and Responsibilities:

- Dashboard for tracking Corona Virus cases throughout the world
 - This was just for practice purpose
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Junior Data Scientist (Jul'15 - Jan'20)

Organization: Sopra Banking Software (<https://www.soprabanking.com/>)

Project: Sopra Banking Platform | Domain: Banking

Client – National Savings and Investments Bank, UK

Roles and Responsibilities:

- Extending information with third-party sources of information when needed (Experian/GB Group)
- Data mining using state-of-the-art methods
- Enhancing data collection procedures to include information that is relevant for building analytics systems
- Processing, cleansing, and verifying the integrity of data used for analysis
- Use of machine learning techniques such as k-means, neural networks, Naive Bayes, SVM, Decision trees, Random forest, etc.
- Developing Predictive Models to determine users likeliness of subscribing to a term deposit
- Build a R shiny web app to showcase the interactive visualizations
- Developed an automated fetching campaign wise data of calls for doing data science and analysis activities
- Built end to end churn model for NS&I Bank
- Generating the reports to show to customers in R Markdown document.
- Interactive visualization using d3.js

Project: Prediction of house prices | Domain: Real Estate

Client – ACORN properties, UK

Roles and Responsibilities:

- Identify the area wise housing price in UK
- Outlier detection for extraordinary houses to be taken care separately
- Area wise frequency of type of house – detached, semi-detached, terraced.
- According to area, type of house, age, etc. predict the price of house and present to the customer while posting advertisement.

- Based on time series analysis, predict the price of houses in future
- Customer Segmentation and analysis – RFM algorithm to bucket customer into different categories
- Performed statistical analysis on the customer web data to track customer usage of the website and generate engagement reports.
- Presentation and embedding the model into website using the R Shiny app
- Visualizations using ggplot and heatmaps for correlation matrix.

Project: Airbus | Domain: Manufacturing

Client – Airbus

Roles and Responsibilities:

- Impact Analysis (Apriori Algorithm for association)
- Worked with various NLP techniques namely Bag of Words, TF-IDF, TF-IDF-CF, POS-Tagging and word embedding etc.
- Performed Risk Analysis and have applied various statistical and predictive models like naive forecast, time series analysis, and multiple linear regression to detect the correct resolved group
- Presentation of data to the customer using Qlik Sense

ACCOMPLISHMENTS

- **Fortune 500** company experience of 2 years
- **Git certification** from LinkedIn Learning
- Multiple **Python certifications** from LinkedIn Learning
- Nominated and won first prize for **best shiny app** within organization
- Awarded with **Customer Delight Award** for consistency and commitment towards quality of deliveries.
- Awarded with **several applauses** for acquiring the skills in faster pace and working on multiple activities altogether and complete them quickly.
- 1-year travel experience to **England (Durham)**.
- 2 months' travel experience to **Belgium (Brussels)**.
- Completed **Data Analytics MOOCs** from edX, Coursera and DataCamp.
- Certification in **SAS** from Impartus, Gurgaon.
- Participant in 5C Tournaments for organization, playing **basketball** for representing organization.
- **Won first prize** in Group Dance in an event in Sopra Steria named Impulse'15.
- Active participant of organizational activities, which lead to organizational as well as personal growth.
- An active member of an initiative of Sopra Banking i.e., **Yogdaan** to help to poor and needy people.
- Got appreciation from Manager for keeping team environment lively.

STRENGTHS

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|--|----------------------------|
| → Optimistic | → Time and task management |
| → Patience towards completion of tasks | → Quick learning ability |
| → Punctual with deadlines | → Good team player |
| → Positive attitude towards work | → Technology Agnostic |
| → Supreme communication skills | → Email etiquettes |
| | → Innovative |

PERSONAL INFORMATION

Spouse's Name : Yogeeta Sharma

Father's Name : Surender Kumar Sharma

Mother's Name : Reeta Sharma

Date of Birth : 30th March 1994

Marital Status : Married

Nationality : Indian