Kushagra Agrawal

Data Scientist

₽ PROFILE

I am a budding Data Scientist with practical experience in building full-stack data science projects. I have hands-on expertise in leveraging machine learning, data analysis, and visualization techniques to solve real-world problems, coupled with a growing understanding of mathematics, statistics, and programming for data-driven decision-making.

⊟ PROJECTS

Fire Weather Index Prediction GitHub Link

- Designed and implemented a **Fire Weather Index (FWI) Prediction** system to assess and predict wildfire risks based on meteorological conditions.
- Developed in Python with advanced machine learning models to predict FWI values accurately, enabling informed decision-making for fire management and prevention.
- Utilized **climate datasets** comprising temperature, wind speed, precipitation, and humidity for training and testing.
- Reduced prediction errors by 20% compared to baseline models through hyperparameter tuning and feature engineering.
- Integrated visualizations using **Matplotlib** and **Seaborn** to provide intuitive and actionable insights for users.

Customer Risk Analysis (PowerBI Dashboard) GitHub Link

- Built a **Customer Risk Analysis Dashboard** for a financial services firm to assess customer creditworthiness and fraud risks.
- Utilized **Power BI** to create an interactive dashboard featuring **dynamic visuals** such as heatmaps, bar charts, and filters for deep dives into customer segments.
- Incorporated risk scores using statistical models, clustering algorithms, and key metrics like **credit risk** rating, debt-to-income ratio, and default probability.
- The dashboard facilitated a **30% reduction in manual risk evaluation time**, enabling quick identification of high-risk customers.

Jarvis Voice Assistant GitHub Link

- Developed a voice-controlled personal assistant, Jarvis, to perform routine tasks and provide real-time
 information
- Built using **Python** with integrations of **speech recognition** (Google Speech-to-Text API) and **text-to-speech** (pyttsx3) libraries.
- Enabled features such as **web search**, **email sending**, **weather updates**, and opening system applications through voice commands.
- Utilized Natural Language Processing (NLP) to interpret user intents and respond conversationally.
- Integrated APIs for retrieving data such as news, weather, and current events dynamically.
- Enhanced productivity by automating repetitive tasks and offering personalized assistance.

EDUCATION

Bachelor's Degree, Amity University, Noida;

Relevant Coursework: Algorithms and Data Structure, Database Management System,
 Operating System, Computer Network, Linear Algebra, Discrete Mathematics, Fuzzy Logic and Big Data

July 2024–July 2024 Noida, Uttar Pradesh

Schooling, Agarwal Vidya Vihar; Surat;

2012 - 2024

 Relevant Coursework: Communication, Probability and Applied Statistics, Python Programming, Life Ethics Surat, Gujarat

Publications

- My Data Science Learnings So Far (11/2024)
- Struggles in My Data Science Journey (08/2024)
- My Journey into the World of Data (08/2024)

♠ SKILLS ■ SKILLS ■ No. 1 ■ N

Machine Learning | Python | MySQL | PowerBI | Statistical Analysis | Microsoft Excel | Exploratory

Data Analysis | Feature Engineering | Mathematics | Communication

& INTERESTS

Playing Badminton, Chess | Writing Tech Blogs | Traveling | Reading Books

EDUCATION

Bachelor's Degree, Amity University, Noida;

• Cumulative GPA: 8.1/10.0

July 2024–July 2024 Noida, Uttar Pradesh

Relevant Coursework: Algorithms and Data Structure, Database Management System,
 Operating System, Computer Network, Linear Algebra, Discrete Mathematics, Fuzzy Logic and Neural Network, Big Data

Schooling, Agarwal Vidya Vihar; Surat;

• Cumulative GPA: 9.05/10.0

2013 – 2024 Surat, Gujarat

 Relevant Coursework: Machine Learning, Deep Learning, Probability and Applied Statistics, Advance Data Structure and Algorithms, Natural Language Processing, Medical Image Processing

Publications

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