

# Farzeen Arshad Ghuman

Gujranwala, Pakistan

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LinkedIn — GitHub — Portfolio

## Profile

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I am an aspiring Data Scientist with a robust foundation in analyzing complex datasets, developing predictive models, and deriving actionable insights. I leverage advanced statistical and machine learning methodologies to drive business growth and optimization. Demonstrates a keen analytical mindset and a passion for problem-solving, with a proven track record of delivering data-driven solutions.

## Education

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**Bachelor of Science in Data Science**

**Oct, 2024**

GIFT University, Gujranwala

## Skills

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**Programming Languages:** Python, R, PHP, JavaScript, SQL

**Data Tools:** Power BI, Tableau, Pandas, NumPy, Scikit-learn

**Web Development:** HTML, CSS, Bootstrap, jQuery, React

**Other:** Data Visualization, Machine Learning, Cloud Services, Data Analytics

## Experience

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**Data Scientist — Fiverr**

**01/2020 – 08/2023**

- Developed machine learning algorithms to analyze datasets, increasing data accuracy by 20% and enhancing prediction models by 15%.
- Conducted statistical analysis to uncover trends, leading to actionable insights and a 10% increase in revenue.
- Designed and implemented data visualization dashboards using Tableau and Power BI to communicate findings with stakeholders effectively.

**Web Developer & Graphic Designer — Paptech, Gujranwala, Pakistan**

**08/2022 – 11/2022**

- Engineered responsive websites using HTML, CSS, and JavaScript, significantly boosting user engagement and site performance.
- Developed user-centric interfaces for web and mobile applications, adhering to best practices in UX/UI design.
- Executed SEO strategies that increased organic traffic and improved search engine rankings.

## Projects

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### Data Science Projects

- **Multimodal Depression Analysis using MGTDA:** This method leverages the Multi-Modal Graph Transformer for Depression Analysis (MGTDA), which integrates multiple data modalities such as text, audio, facial expressions, body movements, and gaze information. By employing Graph Transformer Convolutional Networks (GTCNs) for each modality and utilizing Transformer Encoders for feature fusion, MGTDA effectively captures and analyzes the relationships within and between these diverse data sources, leading to a robust model for detecting and assessing depression.
- **Chatbot for Mental Health:** A conversational agent designed to provide mental health support by engaging users in dialogue. This chatbot utilizes natural language processing (NLP) to understand and respond to users' inputs, offering real-time guidance, emotional support, and resources. It can assess the user's emotional state, provide coping strategies, and, when necessary, recommend professional help, making it a valuable tool for mental health monitoring and early intervention.

- **Advanced Plant Disease Detection:** Utilized vision transformers for disease classification, featuring an interactive frontend.
- **YouTube Data Analysis:** Derived insights on viewer engagement and content performance from YouTube data.
- **Spotify Data Analysis:** Analyzed user data to refine music recommendation algorithms.
- **Stress Level Detection:** Developed a Streamlit app for stress detection using machine learning models.
- **Customer Segmentation:** Implemented customer segmentation based on purchase behavior using Streamlit.

#### Data Visualization Projects

- **Customer Segmentation Visualization:** Developed visualizations to segment customers based on purchasing behavior, helping to tailor marketing strategies.
- **Financial Performance Dashboard:** Created a dashboard to monitor key financial metrics, enabling real-time tracking of business performance.
- **Website Traffic Analysis:** Visualized web analytics data to track visitor behavior, optimize content, and improve user engagement.
- **Geospatial Data Mapping:** Used geospatial visualizations to analyze and present data related to locations, such as sales by region or delivery routes.
- **Social Media Engagement Tracking:** Designed dashboards to visualize social media metrics, helping businesses understand engagement and optimize their online presence.
- **Supply Chain Optimization Visualization:** Visualized supply chain data to identify bottlenecks and optimize logistics processes.
- **Healthcare Data Analysis:** Created visual representations of patient data to support clinical decision-making and improve healthcare outcomes.
- **Energy Consumption Monitoring:** Developed dashboards to track and visualize energy usage patterns, supporting sustainability initiatives.
- **Market Basket Analysis:** Visualized associations between products in customer transactions to enhance cross-selling strategies.
- **Employee Performance Tracking:** Designed visual tools to monitor employee performance metrics and support HR decision-making processes.

#### Web Development Projects

- **Employee Management System:** Created a PHP-based system for streamlined employee management.
- **Railway Management System:** A comprehensive software solution designed to manage and streamline the operations of a railway network.
- **Chess Game:** Programmed a Java-based chess game with an intuitive user interface.
- **Pharmacy Management System:** Developed a PHP system for efficient management of pharmacy operations.
- **Online Job Portal:** Constructed a job portal connecting employers with job seekers as a university project.

#### Certifications

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- Data Analysis - Google
- Machine Learning with Apache Spark 3.0 using Scala - Udemy
- Machine Learning - Fundamental of Python Machine Learning - Udemy
- Graphic Designing
- Data Science Foundations
- Digital Marketing – Christian Technical Center

#### Achievements

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- First Position in 1st Semester
- First Position in 5th Semester
- Third Position in Mathematical Quiz Competition Club