

Mehvish Kiani

+923045567918 | mehvishkiani8@gmail.com | linkedin.com/in/mehvish-kiani-92720720a/ | github.com/MehvishKiani

Professional Profile

I am a Computer Science graduate with strong experience in data science, machine learning, and artificial intelligence through internships at leading institutes such as NCAI and KICS. Skilled in Python, TensorFlow, and scikit-learn, I have applied analytical and problem-solving abilities to real-world projects ranging from AI-driven healthcare solutions to IoT-based systems. Passionate about technology and innovation, I strive to bridge data-driven insights with practical impact.

EDUCATION

Muslim Youth University Islamabad, Pakistan

Oct 2021– July 2025

Bachelor's in Computer Science

CGPA: 3.44

Final Year Project (FYP): IoT-driven Vertical Farming Optimization using Machine Learning and Deep Learning

- Developed an intelligent vertical farming system integrating IoT sensors with ML/DL models for optimizing plant growth.
- Monitored environmental parameters (temperature, humidity, pH, nutrient level, CO₂, air quality, light intensity).
- Applied Random Forest, Decision Tree, kNN, CNN, and RNN for growth stage prediction.
- Aimed to enhance yield, resource efficiency, and sustainability in agriculture.

EXPERIENCE

Muslim Youth University, Islamabad — Intern – Assistant to Director BASR

June 2025 – Aug 2025

- Director BASR in administrative, research, and coordination tasks
- Gained exposure to academic processes, official documentation, and research evaluation procedures

BiStartX

March 2025 – May 2025

Intern – Remote

- Engaged in a Data Science track focused on data analysis, machine learning, and data-driven decision-making
- Worked on real-world projects to enhance skills in statistical modeling and delivering actionable insights

National Center of Artificial Intelligence (NCAI), NUST Islamabad

August 2024 – Oct 2024

Data Science Intern

- Gained over a year of hands-on experience in data science and machine learning
- Developed statistical models and machine learning solutions to solve complex problems and provide insights

Al-Khawarizmi Institute of Computer Science (KICS), UET Lahore

July 2023 – June 2024

Data Science Intern

- Over a year of practical experience in data science and machine learning, applying analytical techniques to real-world scenarios
- Designed and implemented statistical models and machine learning solutions to address complex problems and deliver actionable insights.

Academic PROJECTS

➤ **IoT-Driven Vertical Farming using Deep Learning for Cultivation of Medicinal Plants (FYP)**

Sep 2025

[GitHub](#)

- Built an IoT-enabled system with environmental sensors for monitoring plant growth (temperature, humidity, CO₂, pH, etc.).
- Applied CNN and RNN models for growth stage prediction and optimized resource allocation (water, nutrients, light).
- Integrated real-time data with cloud storage for scalable monitoring and analysis.

➤ **Comparative Analysis of ML vs Transformer-Based NLP for Text Classification**

Aug 2025

[GitHub](#)

- Compared traditional ML algorithms (SVM, Naïve Bayes, Logistic Regression) with transformer-based models (BERT, DistilBERT).
 - Evaluated performance using accuracy, precision, recall, and F1-score across multiple benchmark datasets.
 - Highlighted trade-offs between efficiency and accuracy for real-world NLP tasks.
-
- **Human Posture Detection using MediaPipe & OpenCV** Jul 2025
[GitHub](#)
- Developed a real-time human posture detection system using MediaPipe's pose estimation framework.
 - Implemented joint angle-based calculations for monitoring physical exercises and daily activities.
 - Designed feedback mechanism for performance improvement in fitness applications.
-
- **Email Spam Detection** Jul 2025
[GitHub](#)
- Built spam classification models using Naïve Bayes and Logistic Regression.
 - Preprocessed textual data with tokenization, stopword removal, and TF-IDF vectorization.
 - Achieved high classification accuracy in filtering spam vs. non-spam emails.
-
- **SUV Car Data Analysis** Jun 2025
[GitHub](#)
- Analyzed SUV purchase dataset to identify buying patterns based on demographic features (age, salary).
 - Applied Logistic Regression and Decision Tree models to predict likelihood of purchase.
 - Visualized insights with Matplotlib for business decision support.
-
- **Titanic Data Analysis** May 2025
[GitHub](#)
- Performed exploratory data analysis (EDA) on Titanic dataset to identify survival patterns.
 - Applied Logistic Regression and Random Forest classifiers for survival prediction.
 - Evaluated models with confusion matrix, precision, recall, and accuracy metrics
-
- **House Price Prediction Model** Mar 2025
[GitHub](#)
- Built regression models (Linear Regression, Logistic Regression) for house price prediction.
 - Optimized performance using feature engineering, outlier handling, and model tuning.
 - Visualized feature importance and residuals for interpretation
-
- **Fashion MNIST Classification** Feb 2025
[GitHub](#)
- Trained Convolutional Neural Networks (CNNs) on Fashion MNIST dataset for clothing item classification.
 - Improved accuracy using dropout layers, normalization, and tuning hyperparameters.
 - Evaluated performance using confusion matrices and accuracy curves.
-
- **Frailty Detection | Python, MediaPipe, OpenCV, scikit-learn** Jan 2025
[GitHub](#)
- Designed a markerless frailty detection system using camera-based motion capture.
 - Extracted elbow joint angles and rotational velocities to assess motor performance.
 - Applied threshold-based methods and ML models for frailty index prediction.
-
- **Sentiment Analysis on Twitter Dataset** May 2023
[GitHub](#)

- Collected and analyzed Twitter data for sentiment classification (positive, negative, neutral).
- Preprocessed tweets using tokenization, stopwords removal, and lemmatization.
- Trained ML models for public opinion trend analysis.

➤ **Audio Processing**

Sep 2022

[GitHub](#)

- Extracted acoustic features such as MFCCs, chroma, and spectral contrast from audio data.
- Applied ML models for classification and improved performance with feature engineering.
- Built reusable pipelines for audio preprocessing and evaluation.

Achievements & Certifications

➤ **Google Data Analytics Specialization**

Offered By: Google (Jan 2024)

[View Certificate](#)

➤ **Introduction to Generative AI**

Offered By: Google Cloud (Sep 2023)

[View Certificate](#)

➤ **Foundations: Data, Data, Everywhere**

Offered By: Google (Dec 2023)

[View Certificate](#)

➤ **Process Data from Dirty to Clean**

Offered By: Google (Jan 2024)

[View Certificate](#)

➤ **Lloyds Banking Group – Data Science Job Simulation**

Offered By: Forage (Sep 2025)

[View Certificate](#)

➤ **Tata – Data Visualization: Empowering Business with Effective Insights Job Simulation**

Offered By: Forage (Sep 2025)

[View Certificate](#)

➤ **BCG – Strategy Consulting Job Simulation**

Offered By: Forage (Aug 2024)

[View Certificate](#)

➤ **Accenture North America – Data Analytics & Visualization Job Simulation**

Offered By: Forage (Apr 2024)

[View Certificate](#)

➤ **BCG – Data Science Job Simulation**

Offered By: Forage (Apr 2024)

[View Certificate](#)

➤ **BCG – GenAI Job Simulation**

Offered By: Forage (Apr 2024)

[View Certificate](#)

➤ **Commonwealth Bank – Introduction to Data Science Job Simulation**

Offered By: Forage (Apr 2024)

[View Certificate](#)

➤ **British Airways – Data Science Job Simulation**

Offered By: Forage (Mar 2024)

[View Certificate](#)

➤ **Quantium – Data Analytics Job Simulation**

Offered By: Forage (Mar 2024)

[View Certificate](#)

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML, CSS, SQL

Data Analysis: Google Data Analytics Specialization, Power BI

Developer/Design Tools: Visual Studio, VS Code, Google Colab, Canva, Figma

Soft Skills: Leadership, Communication (Written & Verbal), Problem-Solving, Organizational Skills, Teamwork