

Humza Khaliq

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Technical Skills

AI & Data: LLM workflows, EDA, sentiment analysis, anomaly detection, data pipelines, ML modeling

Frameworks: Flask, Next.js, React, Node.js, Supabase, Tailwind CSS, YOLOv8, REST APIs

Languages: Python, Java, R, SQL, MATLAB, JavaScript, HTML/CSS

Tools: Tableau, Power BI, Linux/Unix, Bash, Alteryx, Google Colab, Jupyter, VSCode, Vercel, Render, Git, Figma

Domains: Business intelligence, Software Quality Assurance, Test Automation Product Analytics, Data Visualization

Experience

Elevate The Game

Remote

Website Developer

Apr. 2026 – Present

- Developed a responsive full-stack website and client portal using Next.js, Supabase, and Tailwind CSS to support partner onboarding, resource access, and program visibility.
- Implemented authenticated client/admin workflows and ran validation tests to verify functionality, track defects, and improve overall system quality across presentations, contracts, and curriculum files.

The Cutfish

Amherst, MA

Founder & Developer

Oct. 2025 – Present

- Founded a haircutting business and built a custom web app using Flask, Python, and HTML to manage bookings, generating 20+ appointments in the first 2 weeks.
- Designed a responsive booking flow with automated test coverage and debugging workflows to verify reliability, reduce defects, and minimize scheduling conflicts.

Beats by Dre

Remote

Insights Externship

May 2025 – Jul. 2025

- Conducted qualitative and quantitative consumer insights analysis, applying statistical techniques to survey and review data across 30+ data points.
- Built an AI-enhanced dashboard with data visualizations to communicate sentiment trends and validate insights across 30+ data points, ensuring reliability of reported results.

Techwards

Remote

Data Intern

Jun. 2023 – Aug. 2024

- Contributed to backend development and testing for the Chatwards AI Chatbot in a Linux environment, writing test cases in Python to verify functionality and debug issues prior to deployment.
- Collaborated with engineers on code reviews and validation workflows, supporting reliable production releases and streamlined US client operations.

Projects

Beats by Dre – EDA & Sentiment Analysis | Python, Matplotlib, Seaborn, Google Colab

Engineered 25+ visualizations including word clouds, heatmaps, box plots, and scatter plots to compare customer sentiment across 5 competing Bluetooth speaker brands. Implemented validation checks and automated data quality scripts to ensure accuracy of analytical outputs. Built an EDA dashboard synthesizing polarity trends, review volume, and keyword frequency across 50+ Amazon reviews, translating raw data into competitive insights.

Lume – Wildfire Detection System | Python, Flask, YOLOv8, Seaborn

Developed a real-time fire detection system using Flask and YOLOv8, enabling automated analysis to identify smoke and fire in video streams. Designed test cases to validate model performance across edge cases and iterated on debugging workflows to improve detection reliability.

Pollution Analysis of Pakistan | R, Pandas, Matplotlib, NumPy, Scikit-learn

Automated model evaluation and validated predictions against live weather API to verify accuracy. Built a Random Forest Regression model ($R^2 = 0.85$) and Classifier, identifying Lahore as the most polluted city with an average of $292.92 \mu\text{g}/\text{m}^3$.

Education

University of Massachusetts Amherst

May 2026

BBA in Operations & Information Management, BS in Informatics

Leadership & Involvement

Pakistan Swimming Federation

National Swimmer | May 2017 – 2020

Represented Pakistan at the 7th FINA World Junior Championships in Budapest; school team captain with 100+ gold medals in national competitions.

UMass Amherst Student Organizations

Treasurer, Cricket Club; Team Leader, MassAI; Member of Entrepreneurship Club, Pakistani Student Organization, and Muslim Student Association.