

# Muhammad Umar Farooq

## AI/ML Expert and Full Stack Web Developer

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## Career Objective

Aspiring Computer Science professional with a passion for learning new technologies and creating innovative web solutions. Currently pursuing Bachelor's studies while actively developing real-world projects. Seeking opportunities to apply and grow my skills in dynamic tech environments while preparing for a successful career in software development. Committed to continuous learning and staying current with industry best practices and emerging technologies.

## Professional Highlights

- 3+ Years Academic Experience
- 50+ Projects Completed
- 30+ Worldwide Clients
- 1000+ Hours of Development

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## Technical Skills

### Artificial Intelligence & Machine Learning:

- Languages & Libraries: Python, TensorFlow, PyTorch, Scikit-learn, OpenCV
- Deep Learning: CNNs (Convolutional Neural Networks), Transfer Learning, Computer Vision
- Data Science: Pandas, NumPy, Matplotlib, Data Preprocessing & Visualization
- Concepts: Image Classification, Object Detection, Model Training & Evaluation

### Web Development:

- HTML5/CSS3 (95%), JavaScript (85%), React.js (90%)
- PHP (75%), TypeScript (80%), Tailwind CSS (90%)

- Bootstrap, Next.js, Redux

### Programming Languages:

- Node.js (85%), Express.js (80%), Python (75%)
- C++ (80%), Java (75%), Object-Oriented Programming

### Databases & Systems:

- MongoDB (80%), MySQL (70%), PostgreSQL (70%)
- SQL, Database Design, Data Structures & Algorithms

### Tools & Technologies:

- Git & GitHub (90%), DevOps (70%), Postman (65%)
- Figma (75%), Stella Architect (85%)
- Vercel, Netlify, Webpack, Vite

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## Featured Projects

**Brain Tumor Detection System** A medical diagnostic tool utilizing deep learning algorithms to detect and classify brain tumors from MRI scans. Leveraged Convolutional Neural Networks (CNN) to achieve high accuracy in distinguishing between healthy and tumorous tissue to assist in early diagnosis.

- *Tech Stack:* Python, TensorFlow/Keras, OpenCV, CNN, Deep Learning

**Face Mask Detection System** A real-time computer vision application designed to monitor public health compliance. Capable of detecting human faces in live video streams and classifying them as "Masked" or "Unmasked" with high precision to ensure safety protocols.

- *Tech Stack:* Python, OpenCV, PyTorch, MobileNet, Computer Vision

**AI Powered Space Mission and Satellite Tracking System** A comprehensive full-stack platform for space mission planning, satellite tracking, and debris monitoring. Features AI-powered predictions, real-time tracking, collision risk assessment, and 3D visualizations.

- *Tech Stack:* React, Node.js, MongoDB, Stripe, AI/ML

**Multi-Vendor E-commerce Platform** A robust multi-vendor eCommerce platform with product browsing, secure shopping, and a comprehensive admin dashboard for managing vendors, products, orders, and customers.

- *Tech Stack:* PHP, MySQL, Tailwind CSS, Payment Gateway

**Smart Education Portal** A centralized education platform with role-based dashboards for students, faculty, and admins. Enables course exploration, enrollment, management, and performance tracking with analytics.

- *Tech Stack:* JavaScript, PHP, MySQL, Analytics

**Movie Catalog Web Application** A dynamic movie catalog web app featuring movie browsing, search, ratings, and user accounts. Includes an admin dashboard for managing content.

- *Tech Stack:* AJAX, PHP, MySQL, JavaScript

**Gym Management System** A comprehensive gym management system with role-based dashboards, workout tracking, progress monitoring, and AI-powered fitness recommendations.

- *Tech Stack:* Bootstrap, JavaScript, PHP, AI Recommendations

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## Experience & Academic Projects

### Web Development Projects (Academic & Freelance) | 2021 – Present

- Developed responsive websites using HTML, CSS, JavaScript, and PHP.
- Built front-end and back-end components of dynamic web applications.
- Created 50+ projects including e-commerce platforms and educational portals.
- Worked with 30+ worldwide clients on freelance projects.

### Data Structures & Algorithms (Academic Projects) | 2022 – 2023

- Implemented common data structures (linked lists, trees, stacks, queues) using C++ and Java.
- Developed algorithms for sorting, searching, and graph traversal.

### Database Management Systems (Academic Projects) | 2022 – 2023

- Designed database schemas for various applications including e-commerce systems.
  - Implemented data normalization and optimization techniques using MySQL, MongoDB, and PostgreSQL.
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## Education

**Bachelor of Science in Computer Science** COMSATS University Islamabad, Vehari Campus 2021 – 2025 (*Expected*)

- **CGPA:** 3.5/4.0
- **Relevant Coursework:** Data Structures & Algorithms, Database Management, OOP, Web Development, Software Engineering, AI.

## Certifications

### Python with Data Science Course

- Getting started with Data science from Udemy

**Web Development Training** | NesterSky Software House, Vehari (2023)

- Completed hands-on training covering full-stack development basics.

### AI/ML internship for Developer Hub corporation

- Complete my internship by gaining hand-on experience on ML and DL.

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## Core Competencies & Languages

- **Technical:** Full Stack Development, API Integration, Database Design.
- **Soft Skills:** Problem Solving, Client Communication, Team Collaboration.
- **Languages:** English (Good), Urdu (Native), Punjabi (Native).