

# **Umaima Kamal**

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Location: Karachi, Pakistan



## **Objective:**

Recent BS Software Engineering graduate with skills in development, particularly in artificial intelligence and machine learning. seeking internship or entry-level opportunities to apply my technical expertise in a developer role and contribute to impactful software solutions.

## **Education:**

### **Science**

Education Trust Nasra School, Karachi  
Aga Khan Board | Year of Matriculation: 2018

### **BS Software Engineering**

Iqra University Main Campus, Karachi  
Year of Graduation: 2025

### **Computer Science**

Nasra Girls College, Karachi  
Karachi Board | Year of Intermediate: 2020

## **Technical Skills:**

**Front-End Technologies:** HTML, CSS, JavaScript, Bootstrap, React.

**Back-End Technologies:** Java, Python

**Databases:** MySQL, SQLite.

**Tools & Platforms:** Git, GitHub, VS Code, Eclipse, IntelliJ, PyCharm, Jupyter, Google Colab, Postman, Figma, Replit, Canva, Cisco Packet Tracer, Jira, Microsoft Office.

**Concepts:** OOP, Data Structures, DBMS, Agile Methodology, MVC architectural, Mobile Application, Machine Learning, Artificial intelligence, Networking, Project Management, Mathematics.

## **Projects:**

### **Employee Feedback System with Sentiment Analysis**

- Tech: Python, Scikit-learn (Naive Bayes, SVM), NLTK, Flask, HTML/CSS/Bootstrap
- Used Amazon employee review dataset, and Performed sentiment analysis to understand employee satisfaction.

### **Online Grocery Shopping App (Budget Mania)**

- Tech: Flutter, Python, Flask, pandas, Firebase, Scikit-learn (Cosine\_similarity, MinMaxScaler)
- Features: User authentication, cart system, wishlist, product recommendation with providing budget-conscious shopping

### **Online Voting System**

- Tech: Java, OOP, SRS, Function Point Analysis, COCOMO, Agile
- Developed a secure voting system with user & candidate registration, real-time vote casting, and result tracking.
- Refactored code using clean architecture and exception handling to improve maintainability.

### **Air Scheduling System using Fuzzy Logic**

- Tech: Python, Fuzzy Logic, Mamdani Inference
- Designed a fuzzy controller to schedule flights efficiently by evaluating time deviation and aircraft load. Implemented fuzzification, rule base, and defuzzification to calculate suitability scores. Compared with traditional greedy scheduling, showing better flexibility and real-world performance.

### **Handwritten Digit Recognition using KNN**

- Tech: Python, scikit-learn, KNN, Min-Max Scaling, Cross-Validation
- Built a digit classification system using the K-Nearest Neighbors algorithm on the scikit-learn Digits dataset. Achieved 98.33% accuracy after tuning hyperparameters and applying normalization. Evaluated performance using confusion matrix and classification metrics (precision, recall, F1-score).