# **Muhammad Omair Tahir**

+923355058299 / Email / LinkedIn / Github

#### **EDUCATION**

Comsats University Islamabad B.Sc Computer Science (CGPA: 3.49)

**Beaconhouse College Program** 

A-Levels in Natural Sciences

Islamabad, Pakistan Feb. 2023 – Jan. 2027 Islamabad, Pakistan

Aug. 2020 – May 2022

#### **EXPERIENCE**

Programming Intern

July 2024 – Aug. 2024

Ecare Vision (ECV)

Onsite

Worked on Data Structures and Algorithms (DSA), solving various real-world problems.

- Implemented optimized solutions in C++, improving problem-solving efficiency.
- Practiced and solved LeetCode problems, enhancing algorithmic thinking.
- Gained experience in time complexity analysis and performance optimization.

# **PROJECTS**

Tetris / C++ Dec. 2022

- Developed a Tetris game using SFML (Simple and Fast Multimedia Library) in C++.
- Implemented game logic, including collision detection, piece rotation, and scoring mechanisms.
- Managed graphical rendering and user input handling to create a smooth gaming experience.
- Utilized object-oriented programming (OOP) principles to ensure modular and efficient code.
- Applied event-driven programming for real-time user interaction.

#### Pet Management System / C++

April. 2024

- Implemented modular classes applying encapsulation, inheritance, and polymorphism.
- Used BST for pet management, Linked Lists for owners & appointments, and Hash Tables for inventory.
- Developed bubble sort for owner sorting and recursive traversal for BST pets.
- Designed an interactive command-line interface (CLI) for seamless management.
- Proficient in C++, Data Structures, Sorting Algorithms, Recursion, and CLI Design.

# Customer Service Chatbot / HTM, CSS, JavaScript, Bootstrap & Flask

July. 2024

- Built a chatbot web application using Flask (Python) for the backend and HTML, CSS, JavaScript, Bootstrap 4 for the frontend.
- Implemented dynamic conversation handling with real-time responses.
- Designed an intuitive dark mode UI and clickable keyword suggestions for enhanced interaction.
- Integrated difflib for contextual understanding and multi-turn conversations.
- Proficient in Flask, Python, JavaScript, Bootstrap, NLP, API integration, and UX/UI design.

#### Professional Certifications

### **JavaScript Programming Essentials**

Skills: HTML, CSS, JavaScript & JSON

# **Supervised Machine Learning: Regression & Classification**

• Skills: Supervised Learning, Linear Regression, Logistic Regression & Classification

# **Full Stack Developer Course**

• Skills: Microsoft SQL Server, Python, CSS

# **TECHNICAL SKILLS**

Languages: SQL, Python, Java, JavaScript, C++

Frameworks: React, Node.js, Flask

Developer Tools: Git, Visual Studio Code (VS Code), Visual Studio, PyCharm, IntelliJ, Power BI, Outlook, Excel,

PowerPoint

Libraries: pandas, NumPy, Matplotlib, difflib