# Mubashir Iqbal

**Date of birth:** 18/06/1992 | **Nationality:** Pakistani | **Phone number:**

(+92) 3185099232 (Mobile) | **Email address:** mubshr07@gmail.com | **Website:**

https://github.com/Mubshr07 | **LinkedIn:** https://www.linkedin.com/in/mubshr07/ |

**Address:** 47080, Taxila, Pakistan (Work)

## WORK EXPERIENCE

01/04/2017 – 31/05/2024 Rawalpindi, Pakistan
**SOFTWARE DEVELOPER** CENTRES OF EXCELLENCE IN SCIENCE & APPLIED TECHNOLOGIES: ISLAMABAD, PK

- Develop QWidget Softwares using Qt C++ framework
- Responsible for Software Architecture Design
- Cross-compilation of Software for Windows, Linux, and Embedded Linux operating systems
- System communication protocol design
- Process automation in systems.
- Automatic system integration testing and debugging.
- Coordination with the hardware team.
- Coordination with the Software Quality Insurance team.
- Maintenance of local intranet network and data-sharing.
- Responsible as a System Engineer.

## DIGITAL SKILLS

Microsoft Office | ChatGPT & AI Tools | Prompt Engineering | Adobe Photoshop, illustrator, AI | Digital Skills: Digital Marketing | Basic Knowledge of SEO | Affiliate Marketing

**AI Model development**

Data Science ,Data Analytics | Deep learning/Neural networks | Machine learnig | Tabular Data Modeling | Data analysis Data Validation Data Cleansing

**Programming Languages & Tools**

C C++ C# Programming | Qt/Qt Creator | Database : MySQL(basic) | Python Language - Basic knowledge | PHP (7.x) | Visual Studio Code, Visual Studio | Git

**Website Development**

WordPress and Wix | FrontEnd: HTML, CSS, JavaScript | Blogging, Wordpress | Experience with PHP, SQL, HTML, CSS, JavaScript

## EDUCATION AND TRAINING

15/02/2022 – 10/02/2024 Wah Cantt, Pakistan
**MASTER OF SCIENCE (COMPUTER SCIENCE)** COMSATS University Islamabad, Wah Campus

Python Programming, Django web framework, Web Scraping using BeautifulSoup, Data Visualizations, Exploring many ML and DL models. I also explore the eXplainable Artificial Intelligence (XAI), also called interpretable AI, techniques to analyze the model's prediction behavior. I also take courses of NLP, Information Retrieval, Data Mining, and Advance Neural Networks.

**Website** https://cuiwah.edu.pk/ | **Field of study** Software and applications development and analysis | **Final grade** 3.58 |

**Level in EQF** EQF level 8 | **Thesis** Enhancing Heart Disease Prediction with Explainable AI (XAI)

09/09/2014 – 13/10/2020 Wah Cantt Campus, Pakistan
**BS COMPUTER SCIENCE** Virtual University of Pakistan

C++ Software Engineering, Qt C++ framework, PHP, Front-end Technologies, Ajax, JSON, mySQL Database, Web Development, WordPress, Project and Team Management, Reverse Engineering, OOP, Agile & SCRUM methodologies, GITHUB, Slack, etc

**Website** https://vu.edu.pk/ | **Field of study** Software and applications development and analysis | **Final grade** 3.09 |

**Thesis** Audio Cloud Platform (Web Application)

## LANGUAGE SKILLS

Mother tongue(s): **URDU**

Other language(s):

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---|---|---|---|---|---|
| | Listening | Reading | Spoken production | Spoken interaction | |
| **ENGLISH** | C1 | C1 | B2 | B2 | C1 |

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## RECOMMENDATIONS

**Dr. Hikmat Ullah Khan** Professor

I strongly recommend Mr. Mubashir Iqbal for admission to your Ph.D. study program. I am confident that he will be an asset to your academic community and will make substantial contributions to the advancement of knowledge in his chosen field. I wish him all the best in his future endeavors and recommend him highly. Please feel free to contact me if you need any further information.

**Email** Hikmat.Ullah@uos.edu.pk | **Phone** (+92) 3005601915

**Dr. Muhammad Wasif Nisar** Professor

Mr. Mubashir would be an excellent addition to any research team. I hope you will also find Mr. Mubashir's attributes and potential attractive and I hope that you will favorably consider his application for the post-graduate degree in your University.

**Email** wasif@ciitwah.edu.pk | **Phone** (+92) 3009113482

## PROJECTS

05/02/2020 – 06/11/2020
**PAKVENT-1: Advanced Turbine-Based ICU Ventilator with Real-Time Monitoring and Multi-Mode Support**

Based on turbine-based airflow, this advanced ventilator (PAKVENT-1) comprises a ventilation unit for gas mixing and control, a patient breathing circuit for gas delivery, and real-time oxygen monitoring. The PAKVENT-1 supports multiple ventilation modes, including Pressure Controlled Mandatory Ventilation (P-CMV), Pressure Synchronized Intermittent Mandatory Ventilation (P-SIMV), and Continuous Positive Airway Pressure (CPAP), among others. Powered by the DE10-Nano processing device and developed using the Qt C++ framework version 5.10, the device's intuitive design and reliable performance make it an invaluable asset in medical field, ensuring optimal patient care and safety.

01/07/2023 – 03/09/2023
**Gases Monitoring System & Control**

A Qt C++ framework application for desktop is designed to monitor and manage lab room environmental variables such as $CO_2$ levels, temperature, humidity, pressure, TVOC, IAQ, and resistance gas, providing real time visualization through line and bar plots. The DataFetcher C++ class extracts sensor data, checks for threshold breaches, and activates connected USB relays, logging sensor data with timestamps. The Qlogger class logs the software's operational state and system responses. Supported sensors include BME680, BME688, SGP30, SGP41, ENS160, MiCS5524, MS5803_05BA, TED1X, and USB_RELAY_Switches.

02/07/2023 – CURRENT
## Custom SerialPort Monitor

Custom Serial Port Monitor offers a robust solution for serial port communication on Windows, supporting RS232 and RS485 protocols. It provides comprehensive monitoring, logging, and real-time data visualization in hexadecimal and ASCII formats, along with serial device simulation. Features include script-based automated testing, customizable data sequences, and response definitions, making it invaluable for developers and engineers in debugging, testing, and simulating serial communication.

**Link** https://github.com/Mubshr07/CustomSerialPortMonitorCommunication

## Data Acquisition and Logging (DAQ)

This Qt C++ Embedded Linux software, running on the DE10-Nano Development Kit (LXDE OS), is designed to monitor the vibrations of newly built bridges on different loads in the northern areas of Pakistan. It is used to evaluate the strength of bridges. It monitors and logs values in CSV file from various connected sensors, including accelerometers, differential telemetry sensors, and bipolar voltage sensors. The software features a dedicated window for monitoring four channels in a line-plot view, utilizing the third-party library QCustomPlot. This project provided valuable experience in the Qt framework, including the use of enumerations, structures, threading, and user preference settings, highlighting its practical application and learning benefits.

**Link** https://github.com/Mubshr07/DAQ

## 2048 Puzzle Game

The Custom 2048 Game is an addictive single-player puzzle created by Gabriele Cirulli in 2014. The objective is to combine numbered tiles on a 4x4 grid to reach 2048. Developed using the Qt Framework with a C++ backend, players slide tiles in four directions, merging tiles and adding new ones with each move. The game requires strategic planning to win and avoid running out of moves.
Original Game: https://2048game.com

**Link** https://github.com/Mubshr07/2048PuzzleGame

05/09/2021 – CURRENT
## WordPress Developer | Islamic Inspirations

Islamic Inspiration is a religious website. The author posts Quranic translations in English and Urdu. My responsibilities are building a good design and educating the owner about making categories, and tags, adding feature-image, image-alt-text, etc.

Islamic Inspirations - A daily dose of Motivation

**Link** https://islamicinspirations.net/

02/2020 – 08/2020
## Audio Cloud Web-Application

Audio Cloud is a comprehensive platform that enables users to upload, manage, and share audio files securely. It includes user registration with email verification, secure login, and role-based authorization for uploading files. The platform features an online audio player, engagement metrics (likes, dislikes, shares), and file deletion. Users can organize audio files into categories and search by title, tags, or categories, ensuring efficient content management and user interaction.

**Link** https://github.com/Mubshr07/Audio-Cloud-Web-Application

09/2020 – 10/2020
## Online Pak Car and Bikes Sale Purchase Web Platform

OPCB (Online Pak Cars & Bikes) is a web-based platform for buying and selling vehicles, using PHP, JavaScript, HTML5, and MySQL. Users can register, log in, and manage vehicle ads with features like search filters, vehicle comparisons, and seller contact information. OPCB aims to automate and streamline the vehicle sales process.

**Link** https://github.com/Mubshr07/Online_Pak_Cars_and_Bikes_WebApplication