

# Farooq Ahmad

Software Engineer

📍 Lahore, Pakistan  
☎ +92 320 4606209  
✉ [f\\_ahmed\\_c@outlook.com](mailto:f_ahmed_c@outlook.com)  
in [linkedin.com/in/f-ahmed-c/](https://www.linkedin.com/in/f-ahmed-c/)

## Career Objective

A dedicated software engineer, enthusiastic to leverage my technical and digital skills, creativity and productivity in a dynamic organization where I could collaboratively apply my knowledge and practice my skills in the best of the company's interests while continually learning and growing in a healthy and supportive team environment.

## Education

<b>B.Sc. Computer Engineering</b>	2017 - 2021
National University of Computer & Emerging Sciences (NUCES), FAST Lahore	
<b>Advanced and Ordinary Level, Cambridge International Examinations</b>	2012 - 2017
The City School, Alevel Gulberg Campus (ALGC), Lahore	

## Courses

<b>Data Scrapping (Python)</b>	2022 - Current
<b>Cyber Security</b>	2021 - 2022

## Work Experience

<b>Software Engineer</b>	Currently
<a href="#">Nexus</a>	
Frontend (HTML CSS React) - Backend (DJANGO Python)	

## Projects

### Smart Hybrid HVAC System (Final Year Project)

- Designed and implemented a Heating, Ventilation & Air Conditioning System work in all kinds of weather conditions to provide the user with a comfortable environment by controlling the temperature and humidity levels through a mobile application.
- Built an android mobile application and integrated it with the system via arduino using bluetooth module.
- Hybrid powered DC and solar

### Airline Management System

- Designed and developed an airline management system with basic functionalities
- Website designed with html using CSS and java script, Database designed by engineering ER/EER diagrams using ERwin model and SQL using SQL management studio
- Front end - HTML, Java script, CSS / Back end - myphp, xampp server

### Face Detection System

- Designed and implemented a real-life face detection system utilizing machine learning techniques and advanced algorithms.
- Trained the algorithms on large datasets using popular Python libraries such as NumPy, TensorFlow, and Keras to ensure accuracy and reliability.
- Implemented neural networking using machine learning and artificial intelligence.

### Embedded Home Automation and Security System

- Developed an embedded system on TM4C microcontroller platform in C programming language
- Immediate response on intruder detection or unsafe air quality levels
- Timely reporting of temperature to attached display over UART protocol

### Password Operated Door Locking System

- Orchestrated design and integration of assembly code for 8051 microcontroller family, as part of a 2-member team
- Assisted in the simulation of locking system prototype to correctly detect authorized personnel from unauthorized users and set off an alarm on multiple failed attempts

### Pseudo Ride Hailing Service using C++

- Built a text based interface that displayed useful data to users, such as the minimum distance from a selected origin to destination
- Adopted various graphing algorithms in C++ such as Dijkstra's shortest path algorithm and Prim's minimum spanning tree algorithm

### School Grading System

- Engineered a program to load multiple files of 100+ students' academic performance and output a formatted grade distribution and report
- Leveraged class inheritance relations, polymorphism, and type templates in C++ to develop a semi modular system

## Skills

C/C++, C#, Python, ASSEMBLY, MATLAB, SQL, HTML/CSS/JavaScript, Visual Basics, Arduino, App development, Web development, Digital Logic Designing, Machine Learning, Embedded systems, Micro controllers, PCB circuit designing

## Softwares

Visual Studio, VS code, DEV, SQL Sever, GNS3, Ns3, VMware, DOSBox, emu8086, Keil uVision, Proteus, AutoCAD, Arduino, sketch UP, Microsoft Office, Wireshark, Pspice, SQL Management Studio