

# MUHAMMAD BILAWAL KHAN

Software Engineer

@ engr.bilawal.dev@gmail.com Bilawalkhan775 in Muhammad Bilawal Khan +92 344 3286483 Portfolio

## PROFILE

I am a Software Engineer with hands-on experience in mobile development, cybersecurity, and machine learning with a proven track record of leadership and teamwork in innovative projects. I'm skilled in developing optimized solutions and passionate about enhancing security and privacy in diverse tech environments.

## PROJECTS & RESEARCH

### Thesis

Identified vulnerabilities in Android applications using reverse engineering and machine learning.

### GTD Data Analytics

Analyzed GTD dataset with big data tools, deriving actionable insights for South Asia.

### Stress Detection Research

Designed and evaluated stress detection models with machine learning algorithms.

### Comprehensive Network Simulation

Implemented secure hospital networks with VLAN, STP, and port security configurations.

### Bank Management System

Developed an OOP-based Java application for efficient financial operations.

### Jedit Customization

Enhanced Java based Text editor by adding modules and re-engineering core system features.

### Co-curricular Web Portal

Automated management of university clubs and councils through a centralized platform.

### OOP Game

Created a modular snake game in C++ using object-oriented design principles.

### Alfalah Builders Web Portal

Built a portal for managing construction transactions, schemes, and contractor data.

## CERTIFICATIONS

- Cybersecurity Specialization  
Coursera | Google
- Machine Learning Specialization  
Coursera | DeepLearning.AI
- Linear Algebra for Machine Learning  
Coursera | DeepLearning.AI
- Neural Networks and Deep Learning  
Coursera | DeepLearning.AI
- Metasploit: Penetration Testing  
Coursera Project Network
- Vulnerability Scanning with Nmap  
Coursera Project Network
- NAVTTTC Training  
Computer Networks, SEO & Digital Marketing

## EDUCATION

BS Software Engineering

BUITEMS Takatu Campus

2020 – 2024 CGPA: 3.46

## WORK EXPERIENCE

Software Developer

GUL Technologies

Feb 2025 – Present

- Currently working on the Eye Smart Lamp and Water Quality Kit projects, developing mobile applications and dashboards for each. Responsibilities include designing user interfaces, implementing Bluetooth communication for real-time sensor data, and creating web dashboards for data visualization and device management.

Team Lead

BISSTC

Nov 2024 – Jan 2025

- Delivered a project under budget and 25% ahead of schedule by leading a multidisciplinary team of 5, improving client satisfaction.

Cybersecurity Apprentice

PSEB, Ultrasoft Systems

Sept 2024

- Conducted 10+ web penetration tests, identifying and mitigating 5+ vulnerabilities, which reduced security risks.

Mobile Application Developer

MV Solutions Inc, Canada (Remote)

Apr 2024 – Aug 2024

- Developed a Flutter-based mobile application with user-friendly interfaces, increasing customer engagement.
- Optimized app performance, reducing load times by 25% and improving user retention.

Mobile Application Developer

Gul Technologies

Jan 2024 – Apr 2024

- Designed and implemented the Eye-Smart Helmet monitoring app for miners, visualizing sensor data through dynamic graphs, and improving safety reporting efficiency by 30%.

## HONORS & AWARDS

- Red Team Regional Winner  
Ignite Cybersecurity Hackathon 2024
- National Finalist 2023 & 2024  
Ignite Cybersecurity Hackathon