





# MUHAMMAD BILAL

AI Solutions Architect

 [bilalibniqbal.github.io](https://github.com/bilalibniqbal)

 +92 313 5759970  [muhammadbilal.d14@gmail.com](mailto:muhammadbilal.d14@gmail.com)  <https://www.linkedin.com/in/bilalibniqbal/>

 Pakistan  Attock City, Punjab

## EXPERIENCE

### Sr. AI Solutions Architect (Team Lead)

DataPoint Pvt. Ltd.

Islamabad

August 2022 – Present

### Sr, Machine Learning Engineer

DataPoint Pvt. Ltd.

Islamabad

January 2020 – July 2022

### Machine Learning Engineer

Infinity Innovations Inc.

Islamabad

November 2017 – December 2019

### Founder | Chief Scientist

Bilal Labs

Islamabad

October 2017 – Present

- A research-driven company at the forefront of AI technology, delivering innovative solutions in healthcare, finance, robotics, and autonomous systems with a strong commitment to responsible and ethical practices.

## EDUCATION

### COMSATS University Islamabad, Pakistan

Master of Science in Computer Science - MS(CS)

Attock Campus

September 2018 – January 2021

- CGPA: 3.42/4.0

### COMSATS University Islamabad (Formerly CIIT), Pakistan

Bachelor of Science in Software Engineering - BS(SE)

Attock Campus

January 2014 – January 2018

- CGPA: 2.95/4.0

## CERTIFICATIONS

### Deep Learning Specialization

DeepLearning.AI

June 2023

### Generative Adversarial Networks (GANs) Specialization

DeepLearning.AI

June 2023

### Mathematics for Machine Learning and Data Science Specialization

DeepLearning.AI

June 2023

### Machine Learning Engineering for Production (MLOps) Specialization

DeepLearning.AI

June 2023

## PUBLICATIONS

### A Transfer Learning-Based Efficient Spatiotemporal Human Action Recognition Framework for Long and Overlapping Action Classes

February, 2022

Springer Nature: *The Journal of Supercomputing*, vol. 78, issue: 2, pp. 2873-2908

Muhammad Bilal, Muazzam Maqsood, Sadaf Yasmin, Najam Ul Hasan & Seungmin Rho - [DOI](#)

### An Activity Recognition Framework for Overlapping Activities using Transfer Learning

December, 2020

IEEE Computer Society: *2020 International Conference on Computational Science and Computational Intelligence (CSCI)* pp. 701-705

Muhammad Bilal, Muazzam Maqsood, Irfan Mehmood, Mubashir Javaid & Seungmin Rho - [DOI](#)

## PEER REVIEWER

*The Journal of Supercomputing*, Springer Nature . . . . . March 2022 – July 2022

*IEEE ACCESS*, IEEE . . . . . August 2023 – Present

 ORCID  Web of Science

SKILLS

**Languages:** Python, C++ , Swift  
**Libraries:** PyTorch, TensorFlow, OpenCV, SciKit-Learn, NumPy, Pandas, Matplotlib  
**Developer Tools:** VSCode, Jupyter Lab, PyCharm, Google Colab, XCode(iOS app development), Linux  
**Web:** NEXT.JS, React.JS, TypeScript, JavaScript, Tailwind CSS, Bootstrap, Material UI, MongoDB, SQL, Django

PROJECTS

**Airloop**  
*Android and iOS App*

June 2020 – Present

· AirLoop offers the world’s largest road dataset, enabling accurate identification and mapping of road cracks, providing clients with geographically mapped pavement condition data and additional features to make informed decisions, prolong road lifespan, prevent costly rebuilds, and facilitate smart development and revenue planning through their innovative technology platform.

**TollSense**  
*Android and iOS App*

2018

· Automatic Toll Tax Calculation with Vehicle Type and License Plate Recognition System using Deep Learning

**MetriX**  
*Android and iOS App*

2018

· Automatic Electric Meter Reading System using Deep Learning

**Algorithms Encyclopedia**  
*Android and iOS App*

2018

· A mobile application for android and iOS platforms that serves as an encyclopedia of algorithms. These apps provide the details of data structure algorithms, their time complexities, pseudocode, java code with examples, and also provides searching and bookmark capabilities. The android app was developed using Android Studio and Java programming. The iOS app was developed in XCode IDE and Swift programming language.

LANGUAGES

Urdu	Native
English	Proficient
Punjabi	Mother Tongue

REFERENCES

**Dr. Muazzam Maqsood**  
Assistant Professor  
✉ [muazzam.maqsood@cuiatk.edu.pk](mailto:muazzam.maqsood@cuiatk.edu.pk)

Department of Computer Science, COMSATS University Islamabad, Attock

**Dr. Muhammad Tahir**  
Assistant Professor  
✉ [m\\_tahir@ciit-attok.edu.pk](mailto:m_tahir@ciit-attok.edu.pk)

Department of Computer Science, COMSATS University Islamabad, Attock