Hamza Shafiq

2024

in ☍

Pasrur, Sialkot, Pakistan

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EDUCATION

COMSATS UNIVERSITY ISLAMABAD, LAHORE   Lahore, Pakistan

MS/M.Phil. in Mathematics   Sep 2021 – Jan 2024

o Major focused on Mathematical Biology/Mathematical Modeling

o **CGPA:** 3.5/4.00

o **Thesis:** "Dynamical Analysis of the Epidemic Models of COVID-19 and Influenza"

o **Supervisor:** Dr. Sadia Arshad

PMAS ARID AGRICULTURE UNIVERSITY, RAWALPINDI   Rawalpindi, Pakistan

M.Sc. in Mathematics   Sep 2018 – Sep 2020

o 16-Year education

o **CGPA:** 3.62/4.00

GOVT. JINNAH ISLAMIA COLLEGE, SIALKOT (UNIVERSITY OF GUJRAT)   Sialkot, Pakistan

B.Sc. (Maths A-Course, Maths B-Course, Physics)   Oct 2015 – Aug 2017

o 14-Year education

CERTIFICATIONS

IBM Data Science

IBM-International Business Machines Corporation   Coursera

Professional Certificate mastering **10** comprehensive courses in approximately **5** months.

Mathematics for Machine Learning

Imperial College London   Coursera

Specialization Certificate mastering **3** comprehensive courses in approximately **1** month.

Machine Learning

University of Washington   Coursera

Specialization Certificate mastering **4** comprehensive courses in approximately **2** months.

Stanford University & DeepLearning.AI   Coursera

Specialization Certificate mastering **3** comprehensive courses in approximately **2** months.

MATLAB Programming for Engineers and Scientists

Vanderbilt University   Coursera

Specialization Certificate mastering **3** comprehensive courses in approximately **3** months.

Python 3 Programming

University of Michigan   Coursera

Specialization Certificate mastering **5** comprehensive courses in approximately **3** months.

IBM Applied AI
IBM-International Business Machines Corporation   Coursera
Professional Certificate mastering **6** comprehensive courses in approximately **3** months.

Epidemiology in Public Health Practice
Johns Hopkins University   Coursera
Specialization Certificate mastering **5** comprehensive courses in approximately **1** month.

Neural Networks and Deep Learning
DeepLearning.AI   Coursera

Introduction to Complex Analysis
Wesleyan University   Coursera

LANGUAGE SKILLS

Language: Urdu
Other Language: English
[Listening: **B2**, Reading: **B2**, Spoken Interaction: **B1**, Spoken Production: **B1**, Writing: **B2**]

Teaching Merits

VIRTUAL UNIVERSITY OF PAKISTAN   Pasrur, Sialkot, Pakistan
B.Ed. Secondary (1.5-Year)   Oct 2022 – April 2024
   o **Research Project:** "Impact of Practical Visualization Techniques for Conceptual Understanding and Problem-Solving Skills at High Schools in Punjab"

   o **Teaching Practice Long-term:** During my one-semester Teaching Practice/Internship, I selected three subjects Physics for grade 10, Mathematics for grade 6, and Computer Science for grade 8. I engaged in Lesson Planning, conducted Student-Teacher Activities weekly, presented and taught lessons, marked student attendance, participated in Peer Observations, led Co-curricular Activities, and compiled a Report for the Head Teacher during my internship at **Govt. High School No. 2 Pasrur, Sialkot, Pakistan**.

PROJECTS

Coursera Project Network
- Sentimental Analysis on COVID-19 Tweets using Python
- Tracking Objects in Video with Particle Filters
- Climate Geospatial Analysis on Python with Xarray
- Traffic Sign Classification Using Deep Learning in Python/Keras
- Predicting the Weather with Artificial Neural Networks
- Compare time series predictions of COVID-19 deaths
- Reverse and complement nucleic acid sequences (DNA, RNA) using Python

CONFERENCES & SEMINARS

COMSATS UNIVERSITY ISLAMABAD, LAHORE   **Lahore, Pakistan**
One Day International Symposium on Mathematical Sciences   Dec 5, 2023

ABDUS SALAM SCHOOL OF MATHEMATICAL SCIENCES   **Lahore, Pakistan**
Mathematical Modeling and Scientific Computing for Industrial Research (MMSCIR)   Nov 2022

SKILLS & COMPETENCIES

o **Tools & Software:** VS Studio Code, MATLAB, Python, Jupyter NoteBook, LaTex, MS Office, Power BI, Tableau
o **Programming:** Python, MATLAB Programming, HTML, SQL
o **Skills:** Data Science, Data Analysis, Sentimental Analysis, Spatial Analysis, Dynamical Analysis, Mathematical Analysis, Numerical Analysis, Data Visualization, Machine Learning, Deep Learning, Artificial Intelligence, Creating Dashboards, Web Designing, Team-work, Communication, Problem-Solving, Office Productivity

REFERENCES

Reference-I
Dr. Muhammad Hussain
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Reference-II
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       sadia_735@yahoo.com

Reference-III
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       sana.javed17@gmail.com