Zulfiqar Ali

Data Scientist/Researcher

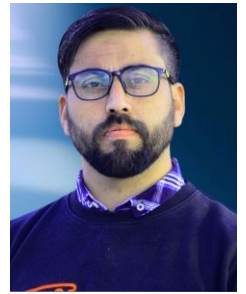🏠 Portfolio ⓖ Github ✉ zulfiqar@mailbox.org 📞 0092341-5883613

EXPERIENCE

MINISTRY OF INFORMATION & BROADCASTING(MOIB) | DATA ANALYST
March 2023 – Continue| Press Information Department, Islamabad

- ➜ Big Data analysis with time series data
- ➜ Real-time analytics & Automation Bots
- ➜ Use Large Language Models (LLMs) to build predictive system using large scale scrapped data

SEJONG UNIVERSITY | GRADUATE RESEARCH STUDENT DEPARTMENT OF OPTICAL ENGINEERING
September 2022 – February 2023| Center for Photonic Systems, Sejong University, South Korea

- ➜ Biomedical photonic imaging
- ➜ Artificial Intelligence in micro-endoscopy imaging

NATIONAL CENTER OF ARTIFICIAL INTELLIGENCE | DEEP LEARNING & COMPUTER VISION ENGINEER
September 2021 – August 2022 | SmartCityLab, Karachi Pakistan

- ➜ Develops methodologies for the analysis, design, and control of autonomous systems
- ➜ Develops the theoretical foundations for networked autonomous systems operating in uncertain, rapidly changing, and potentially adversarial environments.

COMSATS UNIVERSITY ISLAMABAD | GRADUATE RESEARCH ASSISTANT IN STATISTICAL DATA SCIENCE AND MACHINE LEARNING
September 2018 – August 2021 | Islamabad, Pakistan

- ➜ Used statistical data mining technique to collect large-scale survey dataset Hierarchical Bayesian modeling,
- ➜ Data preprocessing, missing value imputation on large scale data using Expected-Maximization and Bayesian algorithms.

PROJECTS

BioMedical Imaging SURVEY ARTICLES -2022
- ➜ Deep learning models for microscopic imaging
- ➜ Meta-heuristic algorithms in image processing

AgriDeepNet | REACTJS AND PYTHON - 2022
- ➜ Machine learning based web application build using React and Flask.
- ➜ AgriDeepNet is used for recommending Crop and Fertilizers based on the soil features with remarkable performance of Deep neural network architecture.
- ➜ React JS is used to build the frontend part of the application.
- ➜ Flaskapi used as endpoints.

AIChatBot | PYTHON REACTJS - 2022
- ➜ Develop a chat bot web application using ReactJs, Python Flask, and Chatterbot.

3DImageSeg | PYTHON - 2020
- ➜ Semantic segmentation using deeplab.
- ➜ Tkinter-based GUI.

SKILLS

PROGRAMMING

Proficient:
Python • SPSS • MATLAB

Experienced:
• LaTeX • R • SagMath • JavaScript • HTML • CSS • SQL

LIBRARIES/FRAMEWORKS
TensorFlow • PyTorch • Scikit-Learn • Pandas • opencv & MediaPipe • Dlib • Matplotlib• Numpy • Tkinter • Seaborn • Django • Fastapi • Flask • NLTk • BeautySoap • jQuery • Node.js • Bootstrap

TOOLS/PLATFORMS
Git • WordPress • Docker • Tableau • Heroku • MongoDB

EDUCATION

MASTER OF SCIENCE IN OPTICAL ENGINEERING |
August 2022 -February 2023| Sejong University, Seoul

MASTER OF SCIENCE IN COMPUTATIONAL MATHEMATICS | COMSATS UNIVERSITY ISLAMABAD
Sept 2018 - Sept 2020 | Islamabad
Coursework in Applied & computational mathematics . GPA: 3.38

BACHELOR OF SCIENCE | UNIVERSITY OF GUJRAT
Sept 2012 - June 2017 |Gujrat
Relevant coursework completed in mathematics, statistics, and scientific programming. GPA: 2.81

COURSEWORK
Computer Applications • • Information Systems • Programming Language for Mathematicians • Data Structures & Algorithms • Computational Linear Algebra • Numerical Computations • Fluid Dynamics • Probability and Statistics

Research & Publications

A Survey on Lungs Nodule Segmentation and Classification- In progress
A Survey on Automatic Segmentation of Biomedical retinal image Segmentation - In progress
Children's Behavior classification Problem using Machine learning Source code
Sentiment analysis Web App Using Python and React WebLink

2D-Heat diffusion modeling and simulation using MATLAB.

Courses & Workshops

→ Data Science Workshop on Analysing PUBG Data
→ DevOps workshop on Reboot the Web Landscape with DevOps and Cloud
→ Deep Learning Specialization
→ IBM Machine Learning Professional Certificate
→ Fundamentals of Scalable Data Science
→ Full Stack Web Development with Angular Specialization
→ Introduction to Programming with Python and Java Specialization
→ Advanced Data Science with IBM Specialization
→ Advanced Machine Learning and Signal Processing.
→ Advanced Machine Learning Specialization
→ Front-End Web UI Frameworks and Tools: Bootstrap 4
→ Introduction to Programming with Python and Java Specialization
→ Exploratory Data Analysis for Machine Learning IBM
→ Deep Learning and Reinforcement Learning IBM
→ Deep Learning in Computer Vision HSE University
→ Natural Language Processing with Classification and Vector Spaces DeepLearning.AI
→ 4th International Conference on Image Processing and Machine Vision.

References

Saqlain Raza, Imam Abdulrahman bin Faisal University Kingdom of Saudi Arabia
✉ srrhussain@iau.edu.sa
Tayyab Nawaz, University of Illinois at Urbana-Champaign USA ✉ tnawaz2@illinois.edu

Extracurricular Activities

→ Gym fitness freak and badminton player at inter university level
→ Directing and advising junior graduate and undergraduate students in Thesis and Final year project related to Machine learning, Computer vision and Data mining.
→ Rock climbing, reading technology blogs,software automation and Linux enthusiast.

LANGUAGES

Fluent
Balti | Urdu | Hindi | English