# Zaka Ur Rehman

## Ali Park Lahore Cantt | +923224174447 | Zakka727@gmail.com | linkedin.com/in/zaka-rehman-f23020

An opportunity to work and upgrade oneself, as well as being in an organization that believes in gaining a competitive edge and giving back to the community. As an individual, I'm self- confident you'll find me creative, funny and naturally passionate. I'm a forward thinker, which others may find inspiring when working as a team. I pride myself on attention to detail, professionalism, and timeliness.

# **Experience**

#### Software Engineer (AI) | PureLogics LLC | May 2024 - Present

I develop and implement machine learning models and algorithms to solve complex problems. I work with large datasets, leveraging deep learning techniques and advanced statistical methods to create intelligent systems. My role involves collaborating with cross-functional teams to integrate.

## Associate Software Engineer | SmartFun Studios (Pvt) Ltd | Aug 2023 - May 2024

I work as a Frontend Developer, creating responsive and user-friendly web interfaces using HTML, CSS, and JavaScript. I specialize in modern frameworks like React ensuring seamless performance and cross-browser compatibility. My role involves translating UI/UX designs into functional code, optimizing applications for speed and scalability. I collaborate with cross-functional teams to deliver high-quality digital products.

## Senior Lecturer | NCBA&E University East Canal Campus Lahore | Feb 2021 - March 2024

Working in the Capacity of Lecturer in faculty of Computer Science Department.

# Visiting Lecturer | Riphah International College Lahore (Harbanspura) | Sep 2021 - Aug 2023

Working in the Capacity of Visiting Lecturer in faculty of Computer Science Department.

## Lecturer | Superior Group of Colleges DHA Campus Lahore | Sep 2019 - Jan 2021

My job description included the teaching to Intermediate and ADP BSCS.

## Assistant Lecturer | Central Institute of Management & Science (Saddar) | Aug 2017 - Aug 2019

My job description included the teaching to Intermediate and BSCS.

# **Projects & Thesis**

## **Quantative Research On Empirical Methods Of Security Risk Assesment In Different Organizations**

The thesis presents the background of the development of the risk analysis and its assessment and evaluation with a proper sequence, describing a list of methods that had been introduced, with proper discussion and explanation over the topic.

#### **Deepfake Detection System**

Developed a deepfake detection system using the Mete Deepfake Detection Challenge dataset, focusing on computer vision and image processing techniques. Employed the ResNet50 architecture and max pooling for feature extraction. Collaborated closely with the data science and engineering teams to pre-process and augment the dataset, enhancing model generalization and performance. Implemented optimization strategies to enhance model performance and integration into existing systems, ensuring robustness and reliability in real-world applications.

#### Order Kr

A food ordering Android App and Admin Dashboard made in Ionic Framework and ASP .NET respectively.

#### **Inventory Management System (IMS)**

A web app that allows shopkeepers to manage all the inventory in their shops. Built in ASP .NET.

#### Certificate

#### Unsupervised Learning, Recommenders, Reinforcement Learning(Coursera) | 20 July 2024

It explores collaborative filtering, content-based, and hybrid recommendation systems. It delves into reinforcement learning principles, including policy iteration and Q-learning

## Advanced Learning Algorithms(Coursera) | 17 July 2024

Learners will acquire skills in building and optimizing complex models, and gain practical experience through hands-on projects and case studies.

#### Python for Data Science, AI & Development(IBM) | 28 June 2024

It covers essential libraries like NumPy, Pandas, and Matplotlib, and provides hands-on experience with data analysis, visualization, and machine learning algorithms.

#### Machine Learning: Regression and Classification(Stanford University) 11 June 2024

To gain practical skills to build, train, and evaluate predictive models using real-world data. Additionally, the course covers techniques for optimizing models through feature engineering, model selection, and hyperparameter tuning.

#### Content Based Training-Computer Science(Riphah University) | 20 April 2024

"Content Based Training-Computer Science" with the objective "Empower Computer Science teachers with advanced content knowledge and effective instructional strategies to enhance student learning outcomes. "By RIC Training Department

#### Effective Teaching Methodologies(Riphah University) | 26 March 2024

"Effective Teaching Methodologies" with the objective to "Foster effective learning through engaging & interactive teaching methods" By RIC Training Department

#### Fundamentals of Deep Learning(NVIDIA) | 25 Dec 2023

Key techniques include backpropagation for optimizing network weights and various activation functions for introducing non-linearity.

#### **Research Work and Publications**

#### Multi-Core Commercial Off-The-Shelf (Cots) Under the Implementation of Fault Tolerance

## Zaka Ur Rehman & another author.

Research paper Published in Research Journal of Computer Science and Information Technology. (ISSN:25197991(Print), 2521-0122(Online) Vol.2 Issue: 1, January March 2018.

## **Enterprise Security of Wi-Fi Networks Using Simulation**

#### Zaka Ur Rehman & another author.

Research paper Published in International Journal for Electronic Crime

Investigation (ISSN: 2522-3429(Print), ISSN: 2616-6003(Online), Vol:2, Issue:2, April-June 2018)

# Use of WhatsApp Technology in Library Services: A Case Study of the University Library of the (NCBA&E), Lahore. Pakistan

# Zaka Ur Rehman & another author.

Research paper Published in Library Philosophy and Practice | 2022

## **Brain Tumor Detection in Machine Learning by Using MRI Images**

Research paper Under Reviewed

Categorization of Depression using Social Media Posts in Data Mining

A Reference Model for Security Risk Management of the Blockchain-based Application

Distributed Learning Algorithm for Securing Modern Vehicular Ad Hoc Network (VANets) and Intelligent Transport Systems (ITS)

#### **Technical Skills**

**Tools and Languages**: Python, C++, JavaScript, HTML, CSS, Bootstrap, PHP, C, Git, SQL, LaTeX, Docker, JIRA, PostgreSQL, MongoDB, Spark, Hadoop, Prompt Engineering, Vertex AI, AWS, Azure, Google Cloud, Excel, PowerPoint, MySQL, Cisco Packet Tracer

**Frameworks** TensorFlow, Transformers, Langchain, OpenAl, LlamaIndex, vLLM, NumPy, Pandas, Pytorch, FastApi, Django, Flask, OpenCV, Seaborn, Statsmodels, Sklearn, Pytest, SciPy, Matplotlib

**Algorithms:** Linear and Logistic Regression, Decision Trees, K Nearest Neighbours, K Means Clustering, Deep QLearning, Convolutional Neural Networks, Recurrent Neural Networks, Support Vector Machines, Gaussian Mixture Models, Topic Modelling, Keyword Extraction, Tokenization, Data Wrangling, Transformers, LLMs, Boosting, Training and Deployment Quantization for Gen Al Apps

Platforms: Visual Studio Code, PyCharm, Jupyter Notebook, Cisco Packet Tracer

OS: Windows, Linux (Ubuntu, CentOS), Android, macOS

**Soft Skill:** Event Management, Program Manager, People Management

## **Education**

#### PhD In Computer Science | Superior University Lahore | 2023-Continued | CGPA 3.89

In PhD in Computer Science at Superior University the following major subjects are Advanced Networks, Advanced Human Computer Interaction, Research Methods, Advanced Image Processing, Advanced Data science and Advanced Machine Learning. My Research direction in PhD in the field of Artificial Neural Networks, Big data, Data Science, Machine learning, Deep learning, Natural languages Processing and Image processing.

#### MS In Computer Science | Lahore Garrison University | 2017-2019 | CGPA 3.40

2 Years Computer Science Program at Lahore Garrison University following major subjects are Advance Computer Network, Advance Data Mining, Numerical Computing And Decision Support System.

#### BS In Computer Science | Lahore Garrison University | 2013-2017 | CGPA 3.51

4 Years Computer Science Program at Lahore Garrison University following major subjects related to programming, software designing and its architecture.

#### F.Sc Pre-Engineering | Garrison Degree College, Lahore | 2011-2013

2 Years Pre-Engineering Program at Garrison Degree College following major subjects are Physics, chemistry and math.

# Matric In Science | Garrison Boys High School, Lahore | 2009-2011

2 Years Matric Program at Garrison boys high school following major subjects are Computer Science, Physics, Chemistry and Math.

## References