# SIDRA ZAFAR

### **OBJECTIVE**

"Purpose-driven individual with an affinity for inspiring the tech leaders of tomorrow with innovative teaching and a passion for fostering creativity in technology."

## WORKING EXPERIENCE

### Lecturer Computer Science and Industry Liaison Coordinator

### Kinnaird College, Lahore

August 2022 - Present

Lahore, Pakistan

- Develop and deliver engaging lectures, tutorials, and practical sessions for UG and PG computer science courses.
- Design and update course materials, syllabi, and assignments to align with current industry trends and academic standards.
- Develop and administer assessments, examinations, and grading for UG and PG students.
- Provide constructive feedback to help students improve their academic performance.
- Provide guidance and mentorship to students, offering academic support and career advice.
- Mentor BS students in their research projects, providing guidance on topics, methodologies, and project development.
- Supervise MS students' research work, guiding them through thesis development, research design, data analysis, and documentation.
- Serve as an academic advisor for both UG and PG students, assisting them in course selection and career planning.
- Build and maintain connections with industry professionals and organizations to facilitate internships, collaborations, and job opportunities for students.

### Lab Instructor

### Fast NUCES, Lahore

**2021 - 2023** 

Lahore, Pakistan

- Trained and developed students' skills in Python, C++ and assembly language compiler
- Used lectures, demonstrations and discussions to instruct students individually and in small groups
- Tested and evaluated student progress to determine effectiveness and impact of teaching methods, materials and projects
- Other job responsibilities include lab manual preparation for each lab, addressing students queries regarding the tool, development of quizzes, midterm and final exams.

#### Research Assistant

#### **Department of Computer Science, Fast Lahore**

March 2022 - December 2022

Lahore, Pakistan

- Conduct extensive literature reviews to identify gaps in existing research.
- Summarize and analyze relevant studies, papers, and articles to provide context for the research.
- Collaborate with the research team to brainstorm and generate research ideas and hypotheses.
- Identify novel and significant research questions or areas of inquiry.

### **EDUCATION**

Ph.D in Computer Science Lahore College for Women University, Lahore

**#** 2023

CGPA: 3.98

Thesis Title: Security Protocols for Internet of Bio Nano Things using Bio-Inspired Approaches

MS in Computer Science

Lahore College for Women University, Lahore

**#** 2012

CGPA: 3.43

Thesis Title: Non-functional requirements for Software Oriented Architecture

BS in Software Engineering
International Islamic University, Islamabad

**2009** 

CGPA: 3.6

FYP: Development of Teachers Feedback system using C. Net

## **RESEARCH AREA**

- Requirement Engineering
- Machine Learning
- Internet of Bio Nano Things
- Access Control

## **COURSES TAUGHT**

- Computer Organization and Assembly language
- Object Oriented Analysis and Design
- Software Testing and Quality Assurance

## PROGRAMMING SKILLS

**Python** 

**Assembly Language** 

C#

C++

C



## **SOFTWARE TOOL**

Latex

MS Office

Contributing Content Writer Hackernoon2021 - PresentLahore, Pakistan

• Creating engaging technology related content, in the form of articles, for a top tech publishing company. Profile Link:

https://hackernoon.com/u/sidrazafar

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## **PUBLISHED PAPERS**

- Bakhshi, Taimur, and Sidra Zafar. "Hybrid Deep Learning Techniques for Securing Bioluminescent Interfaces in Internet of Bio Nano Things." Sensors 23.21 (2023): 8972.
- Zafar, Sidra, et al. "Securing bio-cyber interface for the internet of bio-nano things using particle swarm optimization and artificial neural networks based parameter profiling." Computers in Biology and Medicine 136 (2021): 104707. Impact Factor: 6.69
- Zafar, Sidra, et al. "A systematic review of bio-cyber interface technologies and security issues for internet of bio-nano things." IEEE Access 9 (2021): 93529-93566. Impact Factor: 3.5
- Malik, Ahmad Kamran, Naina Emmanuel, Sidra Zafar, Hasan Ali Khattak, Basit Raza, Sarmadullah Khan, Ali H. Al-Bayatti, Madini O. Alassafi, Ahmed S. Alfakeeh, and Mohammad A. Alqarni. "From conventional to state-of-the-art IoT access control models." Electronics 9, no. 10 (2020): 1693. Impact Factor: 2.9
- Zafar, Sidra, et al. "Channel impulse response-based physical layer authentication in a diffusion-based molecular communication system." 2019 UK/China Emerging Technologies (UCET). IEEE, 2019.
- Zafar, Sidra, et al. "Molecular Communication for Nano networks": 7th International Conference on Computational Modeling (ICCM'16), UC Berkeley, USA, 1-5 August 2016.

## MS-THESIS UNDER SUPERVISION



Severity Prediction of Road Traffic Accidents Using Bio-Inspired Features Selection and Neural Networks

## **STRENGTHS**

Hard-working

Analytical and Conceptual Skills

Motivator & Leader

Decision making

Strategic thinking

Flexibility and Adaptability

### REFEREES

#### Dr. Mariam Rehman

- Department of Information Technology, Government College University Faisalabad
- ▼ mariamrehman@gcuf.edu.pk

#### Dr. Ayesha Iqbal

- ② Department of Computer Science, Lahore College for Women University