

RAZWAN ALI

Educationist || Computer Scientist

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Ambar Muhalla Karachi, road Panjhatti Khairpur

Summary

Computer Scientist, Instructor, Researcher, and Entrepreneur with expertise in Artificial Intelligence, Full-Stack Software Development, and Intelligent Information Systems. Currently pursuing a Master of Science in Computer Science while serving as a Instructor and leading NexaKode, a software development company specializing in custom digital solutions. Published researcher with contributions in AI-driven healthcare and smart sensing technologies. Passionate about bridging academic research with industry innovation through practical AI applications and modern software engineering

Skills

- **Programming Languages:** JavaScript, Java, Python, C++, Kotlin.
- **Frameworks:** Flutter, React.
- **Competencies:** Generative AI & Prompt Engineering, AI in Media, UI/UX Design, Digital Content Strategy, Mobile Application Development, Cybersecurity.
- **Tools:** Adobe XD, Figma, Sketch, TensorFlow, Streamlit, VS Code.
- **Professional Skills** Leadership, Team Management, Project Management, Public Speaking, Student Mentorship, Technical Training.

Experience

The Benazir Bhutto Shaheed University of Technology and Skills Development Khairpur Mirs

Khairpur

Instructor- Department of Computer Science

July 2025 - Present

- Taught undergraduate courses in Computer Science and Artificial Intelligence, including Web Technologies, Human-Computer Interaction, Operating Systems, and Object-Oriented Programming.
- Developed and delivered course materials aligned with modern industry standards and academic learning outcomes.
- Integrated Artificial Intelligence tools and Prompt Engineering concepts into core Computer Science courses to enhance students' practical skills and AI literacy.
- Mentored students participating in the People Information Technology Program (PITP), a collaborative initiative between Sukkur IBA University and the Government of Sindh, providing academic guidance and project supervision.
- Fostered an engaging, student-centered learning environment through hands-on assignments, real-world projects, and interactive teaching methodologies.

Founder & Full Stack Developer

NexaKode

- Founded and lead a software development company delivering custom web and mobile solutions.
- Design and develop scalable full-stack applications using modern technologies
- Collaborate with startups and businesses to digitize operations and improve customer engagement.
- Manage project planning, software architecture, UI/UX design, deployment, and client communication.
- Integrate AI-powered solutions and automation into business workflows.
- Lead end-to-end product development from concept to deployment.

Iqra University main Campus

Karachi

Instructor - Faculty of Engineering Science and Technologies

Dec 2024 - July 2025

- Teaching technical courses, including Operating Systems, Data Structure and Algorithms, Web Designing, Object-Oriented Programming, and Information Communication Technologies (ICT), to students across various semesters.
- Manage departmental tasks such as data collection and analysis for HEC and NCEAC visits.
- Course files Creations including, Weekly plans, Course information sheets, Lab information sheets, course review report and report of detailed technologies involved of courses.

Sukkur IBA University

Sukkur

Co-Trainer-PITP - Govt of Sindh

Oct 2023 - Jan2024

Mobile Application development Boot Camp

- Lead a Course on Android Mobile Application Development
- Led the development and deployment of a mobile app, including server-side management and backend integration.
- Provided technical support to the team, ensuring seamless operation and troubleshooting any IT-related issues.
- Oversee Students in the Development of Android Applications

Education

Master of Science in Computer Science (MSCS)

Shah Abdul Latif University Khairpur | 2026 – Present

- Currently pursuing a Master's degree with a focus on Artificial Intelligence, Intelligent Systems, and Advanced Computing.
- Research interests include Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and AI-driven Decision Support Systems.

Bachelor of Science in Computer Science (BSCS)

Sukkur IBA University | 2019 – 2024

- Graduated with a strong foundation in Computer Science, Software Engineering, Artificial Intelligence, Mobile Application Development, and Database Systems.
- **Final Year Project:** The Smart Teleclinic App – An AI-enabled telemedicine platform integrating WebRTC, Firebase, and digital payment solutions.

Courses & Certificates

- Information Systems Auditing, Controls and Assurance - **The Hong Kong University of Science and Technology**
- Google Ai Essential- **Google Official**
- Programming for Everybody - **University of Michigan - United States**
- Git for Developers Using Github - **Coursera**
- Object-Oriented Programming with Java - **Coursera**
- Object Detection with OpenCV - **Coursera**

Research Interests

- Artificial Intelligence (AI)
- Large Language Models (LLMs)
- Retrieval-Augmented Generation (RAG)
- Medical Decision Support Systems
- Internet of Things (IoT)
- Smart Sensors and Embedded Systems
- Human-Computer Interaction
- Intelligent Information Systems

RESEARCH PUBLICATIONS

Journal Publications

- **Fundamentals and Advances in Ultra-Low Moisture Sensing: From Nanostructured Interfaces to Smart Industrial Infrastructure**
 - Spectrum of Engineering Sciences, 2026
 - ISSN (e): 3007-3138 | ISSN (p): 3007-312X

Conference Paper

- **Enhancing Clinical Decision Support: A RAG-Based System for Accurate, Citable, and Low-Hallucination Medical Recommendations**
 - 4th International Multidisciplinary Conference on Emerging Trends in Engineering Technology (IMCEET 2026)
 - BBSU-TECH Khairpur

Projects

Enterprise Business Management System (POS & ERP)

Role: Full Stack Developer

Designed and developed a comprehensive enterprise-level Business Management System to automate sales, inventory, purchasing, customer management, financial reporting, and user administration.

Technologies: Python, Flask, SQLite, HTML, CSS, JavaScript.

Sindh Women Bar Association Web Portal

Role: Founder & Full Stack Developer (NexaKode)

Designed, developed, and deployed the official website for the Sindh Women Bar Association. Managed the complete development lifecycle, including UI/UX design, backend development, deployment, and maintenance.

Technologies: React, HTML5, CSS3, JavaScript.

Indoor Localization Mobile Application

Role: Mobile Application Developer

Developed an indoor navigation system that enables users to locate classrooms, laboratories, offices, and university facilities, functioning similarly to Google Maps for indoor environments.

Technologies: Flutter, Firebase, Google Maps APIs.

Smart Teleclinic (Final Year Project)

Developed an AI-enabled telemedicine platform supporting online consultations, appointment scheduling, secure patient records, and integrated digital payments.

Technologies: Kotlin, Java, Firebase, WebRTC, XML, JazzCash API.

Health-Ease: Patient Care Management System

Developed a desktop healthcare management system for hospitals and clinics featuring patient registration, appointment scheduling, medical history management, prescription generation, and reporting.

Technologies: Java, MySQL.

AI-Based Medical Recommendation System

Designed and implemented a Retrieval-Augmented Generation (RAG) system that generates accurate, evidence-based, and low-hallucination medical recommendations using Large Language Models.

Technologies: Python, LangChain, FAISS, OpenAI API, Streamlit.

AI Mood-Based Music Recommendation System

Developed an AI application capable of recognizing users' facial expressions and recommending music according to detected emotions.

Technologies: Python, TensorFlow, OpenCV, Streamlit.

Twitter Sentiment Analysis System

Designed an NLP-based application that analyzes public sentiment from Twitter data using machine learning techniques and visualizes analytical insights.

Technologies: Python, Tweepy, Pandas, Streamlit.

Online Banking Management System

Developed a desktop banking application supporting secure account management, fund transfers, transaction history, OTP verification, and automated statement generation.

Technologies: Java, MySQL, Email API.