Umer Farooq

+19794226517 | umerfarooq@tamu.edu | Bryan, Texas, 77801, United States | Open to Relocate | LinkedIn

EXPERIENCE

Analyst Intern , TEX-E (Texas Entrepreneurship Exchange for Energy), Houston, TX   May 2025 — Present
- Work with Salesforce Nonprofit Cloud and Premier Success Plan to support TEX-E CRM needs
- Develop custom dashboards, integrated Gmail, and redesigned Account and Contact pages to improve data visibility and usability
- Create tailored reports to track partner engagement and internal KPIs across educational institutions and sponsors
- Conduct audience analysis for TEX-E's newsletter and LinkedIn using Mailchimp and platform analytics; proposed improvements for KPI tracking

Graduate Research Assistant, Texas A&M University, College Station, TX   Jan 2023 — Apr 2025
- Conducted interdisciplinary research in engineering education; authored and co-authored papers published in IEEE Access, IEEE FIE, and ASEE conference proceedings
- Designed and executed data analysis pipelines using Python, JMP, and JASP for educational datasets
- Created visualizations to communicate research findings for academic conferences and peer-reviewed publications
- Performed systematic reviews and thematic analyses to synthesize evidence across 291 peer-reviewed studies
- Mentored undergraduate and high school research interns on literature reviews, data coding, data processing, and data analysis

Junior Database Developer, SOFTDESK, Faisalabad, Pakistan   Jun 2017 — Dec 2017
- Designed and implemented a SQL Server database and developed a desktop application in C#, improving operational efficiency for a restaurant management system by 30%

Internee, National Transmission & Despatch Company Ltd. (NTDCL), Lahore, Pakistan   Jul 2016 — Aug 2016
- Monitored and analyzed national power grid performance to ensure stable and reliable transmission
- Designed a transmission system for a small firm by analyzing load requirements and proposed efficient solutions

EDUCATION

Texas A&M University, College Station, United States - *PhD, Interdisciplinary Engineering*   Jan 2023 — Present

University of Engineering and Technology, Lahore, Pakistan - *Master's, Computer Engineering*   Sep 2017 — Dec 2019
Thesis: Acoustic Scenes Classification using Deep Neural Network

National University of Computer & Emerging Sciences, Lahore, Pakistan - *Bachelor's, Electrical Engineering*   Aug 2013 — Jun 2017

CERTIFICATIONS

CIRTL Scholar: Teaching-as-Research, Texas A&M University   Jun 2025
Fundamentals of Accelerated Data Science, NVIDIA   May 2025

AWARDS & ACHIEVEMENTS

2025 Cyber Wise Competition - 1st Place, Texas A&M Institute of Data Science   Apr 2025
Designed and presented a full-stack analytics pipeline for IoT intrusion detection using descriptive, diagnostic, predictive, and prescriptive analysis approaches; Engineered features from CIC-IoT2023 dataset and implemented graph-based data fusion techniques; integrated LLaMA 3 to generate human-interpretable summaries of system alerts

Aggies Invent - 3rd Place, Meloy Engineering Innovation and Entrepreneurship Program   Oct 2024
Developed a prototype for automating the removal and placement of biological sample sequencing flow cells, reducing manual labor and increasing processing efficiency for critical pandemic preparedness; Collaborated with a multidisciplinary team to design a robotics-based solution within 48 hours

TAR Fellowship, Graduate and Professional School, Texas A&M University   Jun 2023
Awarded Teaching as a Researcher (TAR) fellowship for 2023-2024

SKILLS

Data Analysis and Visualization	:	Hypothesis Testing, Regression Analysis, A/B Testing, KPI Reporting, KPI Dashboards, Tableau, Power BI, D3.js, Matplotlib, Seaborn, JMP, JASP
Programming and Tools	:	Python, Java, SQL, Salesforce Nonprofit Cloud, Salesforce Sales Cloud, Canva, Mailchimp, Google BigQuery
Machine Learning and AI Modeling	:	Classification, Clustering, Predictive Modeling, Regression, Feature Engineering, Social Network Analysis, LLaMA 3, Large Language Models
Research Methods	:	Quantitative Analysis, Systematic Reviews, Narrative Reviews, Thematic Analysis, Data Coding

PUBLICATIONS

Total Articles = 8 (1 Journal article, 5 conference articles, and 2 preprints), *Citations: 33, h-index: 3, i-10 index: 1*