AMNA AHMED



PROFILE

To secure a challenging position in a reputable organization to expand my abilities, knowledge, and skills, while making a contribution to an organization's growth.

TECHNICAL SKILLS

- Python Language
- C/C++
- Digital Electronics

WORK EXPERIENCE

Lecturer

[Apr'25 - Present]

Department of CSIT, NED University of Engineering & Technology.

FREELANCE TECHNICAL WRITER

[Mar'22 - Present]

 Worked directly with high end stakeholders to produce and edit content for 600+ blogs and articles under tight deadlines for international and local clients in various formats from Amazon Affiliate Articles to News writing and Technical contents.

Visiting Faculty

[Aug'23 - Oct'23]

Department of CSIT, NED University of Engineering & Technology.

Visiting Faculty

[Jan'22- July'23]

Department of Applied Physics, University of Karachi.

O Level Physics Teacher

[Aug'21-Dec'22]

Sunbeams Grammar School, North Nazimabad, Karachi

Internship (Electronics Engineering)

[5 weeks]

International center for chemical and biological sciences (ICCBS), University of Karachi

ACADEMIC RECORD

MS (Computer Science & Information Technology) | Ned University of Engineering & Technology | [In Progress]

MSc Applied Physics | University of Karachi | [2020]

BSc (Hons) Applied Physics | University of Karachi | [2017-2019]

Intermediate: Grade A | Karachi Board | [2016] Matriculation: Grade A | Karachi Board | [2014]

TEACHING EXPERTISE

- Programming Fundamental
- Electromagnetism
- CIE O-Level Physics

RESEARCH & THESIS

TITLE: Integrating Machine Learning and logic for Transparent Decision-Making in Artificial Intelligence

Ned University of Engineering & Technology | [Oct'22 - Dec'24]

- Developed a hybrid machine learning model combining SVM, Random Forest, and XGBoost to enhance prediction accuracy on the German Credit dataset.
- Preprocessed and manipulated financial data for optimal feature selection, improving model performance.
- Utilized SHAP and LIME for feature contribution analysis, enhancing model interpretability and reducing transparency issues.
- Evaluated model performance using metrics such as confusion matrix, accuracy, precision, and recall, achieving an accuracy improvement as compared to baseline models.

TOOLS & SKILLS: Python, NumPy, Pandas, Scikit-learn, XGBoost, SHAP, LIME, Matplotlib, Seaborn, SVM, Random Forest, Hybrid Models, Confusion Matrix, Classification Report.

ACCOMPLISHED PROJECTS

- Automatic number plate recognition (ANPR) on raspberry pi by using Open CV Python. (Final Year Project)
- The SBC 8051 micro-controller and embedded system by using AT89C51

PUBLICATION

Ahmed, A., Qamar, R., Asif, R., Imran, M., Khurram, M., & Ahmed, S. (2024). The Dead Internet Theory: Investigating the Rise of AI-Generated Content and Bot Dominance in Cyberspace. *Pakistan Journal of Engineering, Technology & Science*, 12(1), 37-48 https://doi.org/10.22555/pjets.v12i1.1077

ACHIEVEMENT

BSc (Hons) in Applied Physics (Gold Medalist)