AMNA AHMED

+92 335 2066935 amna.ahmed2197@gmail.com amnaahm<u>ed@cloud.neduet.edu.</u>

https://www.linkedin.com/in/amna-ahmed-07455b1a7/

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

Department of CSIT, NED University of Engineering & Technology.

Q

O Level Physics Instructor

AL Nafi Academy

FREELANCE TECHNICAL WRITER [Mag

• 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

Department of CSIT, NED University of Engineering & Technology.

Visiting Faculty

Department of Applied Physics, University of Karachi.

O Level Physics Teacher

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]

[Apr'25 - Present]

[Mar'24 - Present]

[Mar'22 - Present]

[Aug'23 - Oct'23]

[Jan'22- July'23]

[Aug'21-Dec'22]

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)