# **Shakir Ahmed**

# Tucson, AZ | +1(520)342-4025 | Portfolio

### **PROFESSIONAL SUMMARY**

MS Data Science student at the University of Arizona (GPA 4.0), excelling in Machine Learning & AI research as a Research Assistant. With 3.5 years of impactful experience as a Business Analyst at Ernst & Young, including 2 promotions within 8 months and 2 Exceptional Awards, have proven skills to translate complex data into strategic solutions, improving business outcomes and driving advancements.

#### **EDUCATION**

University of Arizona – Main Campus Master of Science in Data Science

Amrita Vishwa Vidvapeetham **Bachelor of Technology in Electronics & Communication Engineering** 

#### SKILLS

Programming Language: Python, R, SQL, C, C++, MATLAB

Data Analysis and Visualization: Power BI, Tableau, Pandas, Numpy, EDA, Data Visualization, Matplotlib, Seaborn, Plotly Machine Learning & Statistics: Scikit Learn, Tensorflow, Keras, Sklearn, Pytorch, Time Series Analysis, Hypothesis Testing Software Tools: Jupyter, Git, GitHub, GitLab, Advanced Microsoft Excel, MS Office, Jira Miscellaneous: Statistical Modeling, Regression, Business Analytics, Data Mining, LLMs, Natural Language Processing (NLP)

#### WORK EXPERIENCE

# Machine Learning Engineer Intern (Embedded Systems)

Mistral Solutions, Bengaluru

- Designed & implemented a SoC and optimized an LSTM Neural Network model for gesture recognition, achieving over 90% accuracy.
- Applied semi-supervised learning and real-time data analysis, leading to a 30% improvement in system performance and a 25% enhancement in user experience across applications.
- Engineered a low-latency data pipeline on the SoC, enhancing processing speed by 40% and reducing power consumption by 30%, improving overall system efficiency.

# Research Assistant (ML & AI in Heath Sciences)

University of Arizona (Health Sciences, ASTEC Lab), Arizona

- Integrated OpenAI GPT-4, Deepgram, Elevenlabs, and PlayHT to develop an advanced AI agent achieving a 900ms response time for real-time speech interactions, using GitHub as version control tool.
- Developed an AI workflow system to assist in medical grading application (suture analysis), netting a 70% reduction in grading time.
- Engaged in developing a custom LLM using cloud computing for medical 3D modeling using 3D Gaussian Splatting (3DGS) and Neural Radiance Fields (NeRF), aiming to optimize render size to 70 MB at 60 FPS.

# **Business Consultant (Business Analytics)**

Ernst & Young (EY), Bengaluru

- Extracted key financial insights for 11 clients, enhancing compliance and operational efficiency through technology walkthroughs.
- Reduced reporting and documentation time by 20% through developing 25 interactive dashboards using Power BI & Tableau.
- Decreased risks by 30% and improved control effectiveness by 25% through analyzing 400+ control risks and proposing business improvement recommendations across AWS, Azure, CI/CD, and data pipelines.
- Achieved a 25% decrease in planning and project revisions by managing multiple projects and facilitating effective communication between technology teams and business stakeholders.

### PROJECTS

- Customer Churn Analysis: Power BI dashboard to identify factors for customer attrition and give methods to improve retention rates.
- Supply Chain Analysis: Analytics using Python (ETL), Snowflake & Power BI to create interactive dashboard with supply chain metrics.
- Credit card fraud detection: Built a credit card fraud detection model using regression modeling and neural network.
- Disaster Fake Tweet Classification: Leveraged LSTM & BERT transformers to classify tweets for disaster management.

• Al Pacman Maze Solver: Implemented search algorithms & reinforcement learning for agent to navigate and solve the game.

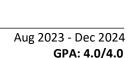
PORTFOLIO: https://shakirverse.com

### CERTIFICATIONS

- IBM Python for Data Science, AI & Development
- Introduction to Machine Learning for Data Science

#### **AWARDS & EXTRACURRICULAR**

- Won two Exceptional awards in Ernst & Young (EY) for personal excellence (Dec 2021 and Jun 2022).
- Won 2<sup>nd</sup> place in District level Dodgeball & 3<sup>rd</sup> place in State Level Throwball.



Jul 2016 - Apr 2020

Mar 2024 – Present

Jun 2024- Present

Oct 2020 — Aug 2023

