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 — Aug 2023 - Dec 2024
Master of Science in Data Science — **GPA: 4.0/4.0**

Amrita Vishwa Vidyapeetham — Jul 2016 - Apr 2020
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) — Jun 2024- Present
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) — Mar 2024 – Present
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) — Oct 2020 — Aug 2023
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.
- **AI 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 2nd place in District level Dodgeball & 3rd place in State Level Throwball.