

MUHAMMAD RAKAY TARIQ | AI/ML Engineer

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SUMMARY

AI/ML Engineer with hands-on experience in developing intelligent, data-driven solutions using deep learning, NLP, and Generative AI. Passionate about building real-world AI applications that enhance automation and decision-making. Skilled in modern AI frameworks. Eager to contribute innovative AI solutions to drive business impact.

SKILLS

- **Programming Languages & Libraries:** Python, NumPy, Pandas, PyTorch, C++, C#
- **AI & ML Frameworks:** Machine Learning, Deep Learning, NLP, Transformers, LLMs, Generative AI, RAG, LangChain
- **Databases & Infrastructure:** SQL, Vector Databases (Qdrant, FAISS), Postgresql
- **APIs & Tools:** FastAPI, Streamlit, Autogen, Azure OpenAI, Vanna.ai
- **Other:** Version Control (Git), Data Visualization, Prompt Engineering, Docker

EXPERIENCE

Asset Integrity Executive
Softoo Pvt Limited

August 2024-Present
Islamabad, Pakistan

- Accurately labeled and categorized diverse assets, including images, following predefined guidelines and standards maintaining high-quality training data for machine learning models.
- Delivering next-generation inspections and autonomous systems that operate reliably at scale that reduce risks and enhance operational efficiency.

EDUCATION

BS Computer Science **CGPA 3.13**

Jan 2020 - Jan 2024

SZABIST, Islamabad
Islamabad, Pakistan

- **Relevant Courses:** Fundamentals of Programming, Object-Oriented Programming, Web Technologies, Data Structures, Designs and Algorithms, Database and Artificial Intelligence, Data Mining.

PROJECTS

Documentation Q/A Chatbot (RAG): Developed a chatbot using Gemma2-9b-It with Groq for LPU inferencing, GoogleGenerativeAIEmbeddings for embeddings, and FAISS for vector storage.

- **Tools Used:** Streamlit, LangChain, FAISS, pyPDFDirectoryLoader, RecursiveCharacterTextSplitter, Groq API, GoogleGenerativeAIEmbeddings.
- **Challenge/Goal:** Develop a retrieve- augmented chatbot capable of answering questions based on uploaded PDF Documents.
- **Approach:** Used FAISS for embeddings, chunked documents with PyPDF and integrated with Gemma2-9b
- **Outcome/Impact:** Achieved High accuracy in document retrivel and natural language responses, improving usability for document-heavy workflows.

CricVision: In-Depth Cricket Data Visualization and Insights: A comprehensive, end-to-end cricket analytics platform leveraging data science and machine learning to deliver advanced insights.

- **Tools Used:** Beautiful Soup, Scrapy, Selenium, Python, Pandas, NumPy, Scikit-learn, TensorFlow/PyTorch, Power BI, Flask/Django, Bootstrap and Docker.
- **Challenge/Goal:** To overcome fragmented cricket data sources and deliver actionable, real-time insights through a unified platform, catering to players, coaches, analysts, and fans with varying technical expertise.
- **Approach:** : Built automated web scrapers to aggregate structured and unstructured data from cricket databases, match reports, and APIs.
- **Outcome/Impact:** Enabled data-driven decision-making for teams/coaches through metrics like "clutch performance" scoring and bowler-batter matchup heatmaps.

CERTIFICATES

Artificial Intelligence Intern
NESCOM

2024

- Awarded Certification of Completion from NESCOM on completing the internship on Security Log Analysis and Automation

Fundamentals of Python
GreatLearning

2022

- Covered advanced Python Technqiues, data manipulation (Pandas) and data visualization (Matplotlib), applied to real world AI/ML projects.