

# Sameer Shaik

sshaik19@depaul.edu | +1 872-319-6974

<https://www.linkedin.com/in/sameershaik65>

## EDUCATION

**DePaul University Aug 2023 - Current** *MS in Data Science (Till now CGPA: 3.5 / 4)*

**Relevant Courses:** Fundamentals of Data Science, Neural Networks and Deep Learning, Natural Language processing, Programming machine learning Applications, Data Analysis and Regression, Intelligent Information Retrieval, Advance Data Analysis

**Jawaharlal Nehru Technological University Hyderabad Sep 2020 - May 2021** *Master of Science in Information Technology (MS in IT)*

**Relevant Courses:** Artificial intelligence, Python, Data Science, Data Structures and Algorithms, Databases, Core Java **CGPA: 9.48**

**Muffakham Jah College of Engineering and Technology Aug 2013 - May 2017** *Bachelor of Engineering (BE) in Information Technology Percentage :61.9* **Relevant Courses:** Programming in Python, Data Structures and Algorithms, Computer Networks, Operating Systems, Databases

## KEY SKILLS/COMPETENCIES

- **Machine Learning:** Decision Trees, Random Forest, XGBoost, Linear Regression, Logistic Regression.
- **Deep Learning & AI:** Neural Networks, XAI (LIME, CAM, D-Rise), CNN, MLP, Generative AI (LLMs, Prompt Engineering).
- **Data Analysis & Manipulation:** Python (Pandas, Scikit-Learn, NumPy), R (dplyr, ggplot2, caret, glmnet, tidyr), SpaCy, SQL.
- **Cloud Computing:** Microsoft Azure (Functions, Blob Storage, Triggers, MongoDB).
- **Project & Pipeline:** RAG Pipeline Development, ML Pipelines, PDF Data Extraction, Vector Databases (Faiss, Pinecone).
- **Software Development:** Large Language Models (LLMs), Langchain, PyTorch, TensorFlow, ONNX

## WORK EXPERIENCE

**Sr Deep Learning Engineer, PathPartner Technology (Acquired by KPIT), Bengaluru (Sep'21 – Aug'23)**

**Client – semiconductor chip manufacturer:**

- Developed Software Suite integrated with PyTorch and TensorFlow for high-performance deep learning training and inference on accelerators.
- Analyzed and identified bugs in the kernels, mapped PyTorch kernels with TPC kernels.
- Developed Operators using combinations of TPC kernels and converted deep learning models to ONNX format for visualization using Netron app.
- Validated operators and kernels using Unit Test and Workload Test cases.
- Integrated explainable AI (XAI) Techniques such as LIME, EiganCAM, D-Rise, Score CAM with YOLOV4.
- Worked on Azure functions, Azure triggers, Azure Storage.

**Data Scientist, Aptroid Consulting India Pvt Ltd, Hyderabad (Sep 2017 – Oct 2020)**

**Bank Statement Analysis:**

- Designed and Developed Spend Analysis System for Banking clients using Machine Learning.
- Built the ML Pipeline for Extracting data from pdf, Preparing and Analyzing financial transaction data.
- Developed an application to generate customized pipelines for data extraction and processing, reducing time and effort while providing flexibility for dynamic requirements.
- Utilized Spacy for Name Entity Recognition (NER) to extract entities from processed data.
- Generated features using techniques like Tf-Idf, unigrams, bigrams, trigrams.
- Implemented Calibrated CV in combination with SGD Classifier for better model interpretability.
- Collaborated with product managers and software engineers to translate requirements into technical specifications for machine learning solutions.

**Turnkey Learning, Hyderabad (May'21 – July'21): (Internship)**

- Developed models for Face Recognition, Classification using CNN, and Phoneme Recognition using MLP.
- Extracted embeddings using Transfer Learning and measured similarity between two faces using Cosine Similarity.
- Created the custom library "Mytorch" to understand the working of PyTorch Library and functions.

**Extra-Curricular Activities – Awards:**

- Team Excellence Award - PathPartner Technology.
- Quantum Computing - Introduction to Quantum Computing course with IBM Quantum. Taught by MIT Scientists. (2020 Sep - 21 May)

**LinkedIn Courses:** Explainable Artificial Intelligence, Working with Large Language Models, Introduction to Prompt Engineering for Generative AI, What Is Generative AI