# Pancham Desai

LinkedIn GitHub

#### **EXPERIENCE**

Truist Bank, Aug 2024 – Present

#### <u>Graduate Research Assistant - Georgia State University</u>

- Engineered high-fidelity synthetic datasets using Generative AI with the LLaMA 3 model to train a supervised learning model for mortgage loan fraud detection, achieving 85% accuracy based on evaluation metrics that validate alignment with original data patterns.
- Accelerated data generation speed by over 80% by utilizing GPU clusters, reducing production time from 1200 seconds to 200 seconds for each batch of 12 records, significantly enhancing efficiency in synthetic data production.

# Thinkbridge Software Pvt. Ltd,

Dec 2020 - Aug 2024

#### Senior Data Scientist

- Developed and deployed advanced machine learning, deep learning, and NLP models, with expertise in predictive analytics, data mining, and cloud deployment using Python, TensorFlow Keras, and Microsoft Azure.
- Led successful project management and client communication using agile methodologies to deliver impactful AI solutions.
- Built a machine learning model for audio classification of sounds captured by IoT devices, achieving 92% accuracy in identifying activities in senior citizens' homes, enhancing real-time safety.
- Deployed the audio classification model with Flask on Microsoft Azure, ensuring scalable and reliable 24/7 operations within a critical healthcare system.
- Developed a Deep Learning NLP model for automated resume screening, reducing recruiter workload by 600% through efficient automation.
- Designed a scalable cloud infrastructure on Microsoft Azure, capable of processing 1,000+ resumes daily, incorporating an automated retraining loop to adapt to new job requirements and maintain a 100% success rate.
- Drove model performance enhancements by implementing continuous updates and periodic retraining, successfully boosting accuracy from 78% to 82% after three iterations, resulting in significant operational improvements.

#### **EDUCATION**

### Georgia State University - J. Mack Robinson College of Business

Aug 2024 - Dec 2025

Masters in Data Science and Analytics

University of Mumbai Aug 2016 - Nov 2020

Bachelors in Electronics and Telecommunication Engineering

## TECHNICAL SKILLS

Language Python, R, SQL Database MySQL

Frameworks TensorFlow, Langchain, Huggingface, Scikit-Learn, Spacy, Pandas, Matplotlib, Seaborn

Core Skills Data Minning, Machine Learning (Supervised and Unsupervised), Deep Learning, NLP GEN AI (OPENAI, Llama 3)
Technologies Microsoft Azure (Function App, Logic App, App Service, Table Storage, Blob Storage, Kubernetes), Flask, Fast API

**PROJECTS** 

#### **Chatbot Query Similarity Prediction**

- Developed a machine learning model to predict query similarity, addressing diverse expressions of the same customer intent.
- Achieved 91% accuracy in identifying similar queries, enhancing query routing for faster resolution.

#### Fraud Detection in Electricity and Gas Consumption

- Using the client's billing history, the aim of the challenge is to detect and recognize clients involved in fraudulent activities.
- The solution will enhance the company's revenues and reduce the losses caused by such fraudulent activities.