




# Shraddha Abhang

 [www.linkedin.com/in/shraddha-abhang](https://www.linkedin.com/in/shraddha-abhang)

 + 91 9757473484

 [shraddhasampatabhang@gmail.com](mailto:shraddhasampatabhang@gmail.com)

 Mumbai, Maharashtra

 <https://github.com/ShraddhaAbhang>

 [https://medium.com/@shraddha\\_abhang](https://medium.com/@shraddha_abhang)

---

## SR SOFTWARE ENGINEER - GEN AI

Sr Software GenAI Engineer with expertise in Generative AI, Retrieval-Augmented Generation (RAG), Machine Learning, and Computer Vision, experienced in building AI-driven products across document intelligence, automation, and analytics. Skilled in Python, AWS, Docker, Git, PostgreSQL, and MongoDB, with hands-on experience in LLM integration, vector search, and end-to-end model deployment. Proficient in frameworks like LangChain, LlamaIndex, and Ollama, with a strong focus on developing scalable, production-ready AI systems. Published researcher with a solid background in transforming business problems into intelligent, data-driven solutions.

---

## SKILLS

OpenAI GPT Models, LLM	OCR, Pdf Extraction, Lang-chain, SpaCy	Computer vision, OpenCV
Fast-API, AI, XgBoost, GenAI	Data Analysis, NLP, Data Processing, Azure	Machine Learning, Tensor Flow
API Monitoring & Automation	Git, AWS EC2, S3, Python, Pandas, Dockers	Report Writing & Presenting

---

## PROFESSIONAL EXPERIENCE

**Sr Software Engineer Gen AI ( full-time ), Indian Tec Solutions** **June 2023 - Present**

- Developed **RAG**-based data extraction applications using **Ollama LLMs**, Gradio, and FastAPI, containerized with **Docker**, and deployed across UAT and Production servers reducing document extraction time.
- Customized the OpenWebUI LLM framework, integrating sensitive data masking via **SpaCy** NLP pipelines and LLM prompt sanitization.
- Developed AI-driven automation for **Banking** Bureau Variable assessments, **KYC** document classification, and compliance workflows.
- Developed an AI-powered Document Question Answering Chatbot using **LangChain** and **OpenAI** GPT-4o Mini, with a **FAISS** vector store and **OpenAI** embeddings for RAG-based retrieval, incorporating **PyMuPDF**, **PyTesseract**, and **pdf2image** for hybrid text+OCR extraction from PDFs.

**Machine Learning Engineer, Indian Tec Solutions** **Nov 2022 - May 2023**

Responsibilities:

- Processed & analyzed **large datasets**, totaling over 10 terabytes, deriving actionable insights & informed decisions.
- Developed and implemented machine learning models for **classification** and predictive analysis using TensorFlow.
- **Conducted research** on emerging data science techniques and tools to stay updated with industry trends. Utilized Python and Pandas to streamline data cleaning processes, resulting in a 30% reduction in preprocessing time.

**Developer ( Internship ), Sportena Tech Pvt Ltd** **Jan 2022 - July 2022**

Responsibilities:

- Developed modular python code for visualizations, analysis and conducted comprehensive data cleaning and preprocessing for efficient model development.

**Analyst ( Internship ), Knowledge Solutions India** **June 2021 - Aug 2021**

- Developed machine learning models collaboratively with team, Maintained Git repository for Prediction Project.

**Developer Program ( Internship ), Accenture** **June 2021**

- Gained experience in technical requirement analysis, system design & software development best practices.
- Developed skills in debugging, unit testing & security best practices to enhance software reliability & compliance.

---

## PROJECTS:

### RAG Query Mail AI – Intelligent Document Processing & Q&A Platform (Indian Tec Solutions)

1. Built and deployed an end-to-end AI document processing and Q&A platform integrating PDF parsing, Surya OCR, PyMuPDF, PyTesseract, LlamaIndex, and Qdrant vector database for semantic search and context-aware RAG. Developed an email-driven intelligent Q&A pipeline with an email watcher for automatic document ingestion into Qdrant, enabling seamless processing and retrieval.
2. Utilized Ollama Llama 3.1 for LLM-based reasoning and citation-aware responses, highlighting document sections for contextual transparency. Integrated a Gradio-based interface with session management for document upload, querying, and cited reference visualization, while automating invoice data extraction and implementing AI agentic workflows for analytics-driven insights.

## PROJECTS:

### Intelligent KYC OCR (Indian Tec Solutions)

1. Drove automation for document processing and classification, harnessing machine learning and OCR (Optical Character Recognition), also handled Aadhaar masking and superresolution APIs.
2. Reduce document processing time by 97% by automatically fetching the document details from uploaded images. Utilized Tenserflow, OpenCV, YOLO, Numpy for the development & deployed the same over AWS.

### Document Question Answering AI Chatbot (Indian Tec Solutions)

1. Developed AI-powered chatbot for document-based question answering using LangChain & OpenAI GPT-4o Mini for intelligent response. This enabled precise & efficient retrieval of information from large & complex PDF files.
2. Integrated FAISS as a vector store retriever for efficient similarity search. Leveraged OpenAI embeddings for contextual query understanding. Extracted text from PDFs using PyMuPDF and applied OCR with PyTesseract and pdf2image for scanned document processing.

### Email Automation (Indian Tec Solutions)

1. Executed the development of intelligent process automation solutions for customer support email categorization, failure log analysis, & API monitoring. Automated email alerts for failure in workflows to adhere prompt response.
2. Executed AI-driven systems to optimize operations leading 15% decrease in errors & enhancing service quality.

### Banking Assessment Automation (Indian Tec Solutions)

1. We built an automated assessment system for Banking Bureau Variables to check if a person will be able to repay the loan or not, streamlining the process, resulting in a 50% reduction in assessment time.
2. Leveraged MongoDB with Python to store the variables also used algorithms like Xgboost for predicting the future customer retention. Implimented with FastAPI.

### Fraud Detection (Indian Tec Solutions)

1. Propelled the development of a machine learning-based fraud detection system, to catch tampered financial documents leveraging advanced analytics and AI algorithms. This solution significantly reduced fraudulent activities in bank statements and improved the security of financial transactions.

### Research and Development (Indian Tec Solutions)

1. R&D initiatives in Alternate Data Research to optimize data enrichment and targeting. These initiatives resulted in innovative AI-driven solutions that empowered data-driven decision-making for customer profiling using internal and alternate data. This helped in 15% decrease in turn around time for decision making.

---

## EDUCATION & CERTIFICATIONS

### EDUCATION

#### Bachelor of Engineering in Information Technology

College: Terna Engineering College. University: University of Mumbai. Grade: 8.41 CGPA

#### Diploma in IT

College: Bharti Vidyapeeth Institute of Technology, Board: M.S.B.T.E. Grade: 86.55%

### CERTIFICATIONS

- Successfully **published Research Paper** for Brain Tumor Detection in International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653 with ISRA Jornal Impact Factor: 7.429.
- **Accenture Digital Skills Certificate** of Achievement on **Artificial Intelligence with 90%** overall score,
- Certified **Accenture Developer Program**, Jun 2021.
- Successful Completed the **Training in Python with Data science & ML, Java, MySQL with PL/SQL** from Kamal Classes, Thane, Jan 2022.
- Successfully Completed **Machine Learning & Image Processing Certification** course from **NASSCOM**, Jan 2022.
- Certified **Oracle Cloud Infrastructure 2024 Generative AI Certified Professional with 87.5%**
- Successfully Completed Workshop on SAP Training Program held at B.V.I.T, Mar 2017.
- Participated in **National Level Paper Presentation** Competition, by D.Y. PATIL, Oct 2015.
- **AI Foundation badge** from **IBM**.
- **Microsoft Technology Associate** Certificate Python.
- Orchestrated a 45% increase in follower engagement by implementing targeted content strategies and leveraging analytics tools for the **Google Developers** Student Club's social media platforms.