

# Harshada Pande

Email : [harshadap30@gmail.com](mailto:harshadap30@gmail.com)

Mobile : +91 976-707-3360

[linkedin.com/harshada-pande](https://www.linkedin.com/in/harshada-pande)

## EDUCATION

---

- **CDAC ACTS, Pune** Pune, India  
*Post Graduation Diploma in Artificial Intelligence; Percentage: 78%; Grade: A* Sept 2021 - April 2022
- **Government College of Engineering, Chandrapur** Chandrapur, India  
*Bachelor of Electrical Engineering; CGPA: 9.98 (Top 0.6% of the Department)* August 2017 - May 2021

## EXPERIENCE

---

- **Eviden** Pune, India  
*Data Scientist* July 2022 - Present
  - **Intelligent Document Processing:** Developed and implemented document processing capabilities into current automation solutions, leveraging Azure Cognitive Services and GENERATIVE AI resulting in a substantial reduction of manual document handling processes by **40%**. Achieved a significant increase in touch-less extension of processes. Led a team of four data science professionals to develop a specialized pipeline, reducing manual efforts in document handling by **70%**. Spearheaded the creation of a tailored pipeline to extract information from AutoCAD diagrams within extensive 2k+ page documents, resulting in a **40%** increase in data extraction accuracy.
  - **Healthcare Solution Design:** Designed and deployed a healthcare routing solution leveraging the Google Maps API, optimizing nurse routes and reducing travel time by **30%**, leading to a **25%** increase in patient service capacity and a **20%** reduction in operational costs. Collaborated with cross-functional teams to integrate generative AI into the solution, enhancing predictive analytics and decision-making processes, resulting in a **15%** improvement in nurse scheduling efficiency and a **10%** increase in patient satisfaction scores.
  - **Conversational AI:** Implemented a sophisticated guided bot for organizational use with the Microsoft Chatbot SDK, significantly improving internal communication and streamlining organizational processes, leading to a **30%** increase in employee productivity. Leveraged the Yellow.ai platform for prompt engineering in the development of conversational AI solutions, enhancing user interaction quality by **25%**. Investigated and integrated large language models (LLMs) within chatbot implementation, utilizing function calling, retrieval-augmented generation (RAGs), and fine-tuning techniques, achieving a **20%** improvement in response accuracy and user satisfaction.

## PROJECTS

---

- **Retrieval Augmented Generation using SLM:** Implemented Retrieval Augmented Generation using Phi-2 model. Set up PDF reader, input prompts, and integrated Microsoft Phi-2 model. Utilized custom embeddings and vector store index for retrieval augmentation. Integrated user-friendly chatbot interface via Gradio.
- **Speaker Diarization using Pyannote and whisper:** Developed speaker diarization leveraging Pyannote for speaker segmentation and Whisper for automatic speech recognition. Developed a system to accurately identify and differentiate between multiple speakers in audio recordings, improving transcription accuracy and enhancing audio analysis capabilities. The integration streamlined the workflow, resulting in more efficient and precise speaker identification and transcription.
- **Speech to text converter:** Orchestrated a solution utilizing the Google Speech-to-Text API to convert WAV files into transcriptions. Enabled users to download the output text as a PDF for convenient utilization. Developed this user-friendly web page using Flask to facilitate seamless interaction with the system.
- **Chat-log Analyzer:** Spearheaded a solution utilizing the GPT-4 API, which involves sending transcripts in text files to GPT-4 along with a system prompt and chat for analysis. Then, converted the response into CSV format for further analysis.

## SKILLS

---

- **Languages:** Python, SQL, JavaScript, C, C++, LaTeX
- **Libraries:** Pandas, NumPy, scikit-learn, TensorFlow, Keras, PyTorch, NLTK, spaCy, OpenCV, Pyannote, Whisper, whisperX, Hugging Face, Seaborn, Matplotlib, GraphQL
- **Artificial Intelligence Techniques:** Data Science, Prompt Engineering, Langchain, Hyper parameter tuning, RAGs, Language Models, FewShot learning, Natural language understanding, Object Detection, CNN, BERT, LSTM, YOLO, OCR, Neural Networks, Data Analysis

- **Frameworks/Tools:** Git, Docker, Flask, Django, RESTful API, Gradio, FastAPI, Postman, Azure AI Language Studio, Azure SQL, MLOps, CI/CD, jenkins, Linux
- **Cloud:** Azure, AWS, GCP

#### AWARDS AND ACHIEVEMENTS

---

- **Silver Award '23:** for delivering an impactful presentation and demonstration that garnered customer appreciation at Eviden.
- **Spot Recognition Award '23:** Won the Women's Generative AI Hackathon by developing an innovative AI solution at Eviden.
- **ABHIRANG '20:** Ranked **1<sup>st</sup>** in College level Singing Competition