# **Keval Sing Saud**

My-PortFolio | LinkedIn | GitHub |

**EDUCATION** 

**University of Mumbai** 

Master of Science in Computer Science

Mumbai, MH, IN

Location: Mumbai, MH, IN

Email: kevalsaud25@gmail.com

Aug 2023 – August 2025

**University of Mumbai** 

Bachelor of Science in Computer Science

Mumbai, MH, IN Jan 2018 – March 2021

**EXPERIENCE** 

## Jr. Software Developer, SquareYards

May 2022 – June 2023

On-site - Mumbai, MH, IN

- Automated data extraction and processing (Data-Mining) using Python requests and Selenium, reducing manual
  effort by 30% and increasing data processing speed by 40%.
- Led the development and integration of AI chatbots leveraging Langchain, Cohere embeddings, and OpenAI GPT-3.5, improving **customer interaction and satisfaction by 25%.**
- Optimized data storage and retrieval by transferring Cohere embeddings to vector databases (Pinecone and Weviate), resulting in a **30% increase in efficiency**.

## **Freelance Python Developer**

Jan 2022 – May 2022

Self-Employeed

- \* Developed predictive models, Flask Web app for client-specific needs, resulting in an average accuracy improvement of 15%.
- \* Collaborated closely with some international clients to understand objectives and deliver tailored solutions within agreed timelines.

#### **MAJOR PROJECTS**

#### **Automation Scraping Software**

Python, Data-Mining, MongoDB

- \* Developed a sophisticated web application utilizing Django and Selenium, leveraging Requests methods for automated web scraping and robust database management.
- \* Implemented MongoDB for efficient storage and management of scraped data, ensuring scalability and performance.
- \* included Celery for task scheduling and execution, optimizing automation workflow upto 20% faster.
- \* Achieved a significant **50% improvement in work efficiency**, accompanied by a remarkable **70% reduction in manual involvement**, demonstrating advanced automation capabilities.

**LLM-ChatBot** 

Langchain, Cohere, Python, Weviate

Source Code

- \* Integrated Langchain with AI chatbot, using Cohere embeddings.
- \* OpenAI GPT-3.5 model for conversational capabilities.
- Transferred Cohere embeddings and implemented similarity search algorithm on the vector database

<u>Convo-Al</u> Gemini-Pro, Google DeepMind

Source Code

- \* Built Chat-bot AI using **Gemini-Pro** by **Google DeepMind**.
- \* Gemini-Pro (Text to Text Model) for text generation.
- \* With a score of 90.0%, Gemini Ultra is the first model to outperform human experts on MMLU

**LoRA Fine Tune - Diffusion Model** 

Python, Diffusers, ML

Source Code

- \* Trained Stable Image GEN Model using LoRA, enhancing training outcomes through improved Image generation.
- \* Evaluated model Training with 30% less consumption of GPU, guiding future improvements.

#### MINOR PROJECTS

#### **Heart Disease Prediction System**

Python, Flask, MySQL, Apache server, Logistic Regression

Source Code

- \* Developed a web-based Heart Disease Prediction System using Python and Flask.
- \* Integrated MySQL for storing user data and prediction results.
- \* Achieved 97% accuracy rate in heart disease prediction.

## Named Entity Recognition(NLP Model)

Python, NLP, BI-LSTM

Source Code

- \* Implemented a BI-LSTM model using TensorFlow for Named Entity Recognition (NER), achieving **98% accuracy**. Integrated embedding layers and bidirectional LSTM layers for context capture.
- \* Preprocessed data with numpy and pandas. Trained the model on labeled data, optimizing hyperparameters. **Evaluated performance using precision (97%), recall (96%), and F1-score (97%).**
- \* Demonstrated superior NER performance, visualized with matplotlib and seaborn. Identified entities accurately, showcasing the model's effectiveness in information extraction.

#### **SKILLS**

Technical Skills: Programming, Data Science, Data Mining, Automation. Frameworks: (LangChain, Django,

Flask, Streamlit, Gradio). Databases: (MongoDB, Cassandra, Redis, Hbase, MySQL). ML-AI:

(LLMs, ML, Data-science, NLP, Diffusion).

**Libraries** : Selenium, Requests, OCR, Pandas, Matplotlib, Scikit-Learn, Numpy, Computer Vision

Languages : Python, SQL, JavaScript, C++, Java

**Typesetting**: LaTeX

**Soft Skills** : Communication, Problem Solving, Teamwork, Adaptability, Leadership

### **CERTIFICATIONS**

- ML Wokshop at IITB
  - \* Completed an intensive workshop conducted by esteemed faculty at IIT Bombay.
  - \* Enhanced proficiency in predictive analytics and data-driven decision-making, resulting in a 20% increase in efficiency in analyzing and interpreting complex datasets.
- Scientific Computing [Python]
- Data Science 101 [Python]

## **TOOLS AND UTILITIES USED**

**LLMs** : Gemini, GPT, Falcon, MPT-30B, Claude, Llama, Phi

**Dev Tools**: HuggingFace, Kaggle, Visual Studio Code, Git, GitLab, PyCharm, Visual Studio, NetBeans,

Anaconda

#### **DECLARATION**

• I do hereby declare that all statements given by me as above are true, complete, and correct to the best of my knowledge and belief.