

# Ankita Sawarkar

+1 5635794068 | [ankitasawarkar1993@gmail.com](mailto:ankitasawarkar1993@gmail.com) | [LinkedIn](#) | [Github](#)

*No visa sponsorship required. Visa status is L2-EAD.*

Well-rounded **Software Development** professional and ML enthusiast with an Engineering background, having in-depth knowledge of Software/Application development, and design with deep insight into various software development life cycles and implementations. Proven knowledge in implementing scalable data-driven solutions and advanced machine learning models to drive business growth.

## SKILLS

- Programming Language – Java, Python, SQL
- Key Skills – Java Web & Application Development, Test Drive Development, Mockito, Exploratory Data Analysis (EDA), Deep Learning
- Backend – Spring Frameworks, Hibernate, Microservices, FastAPI, Swagger
- Frontend – Bootstrap, JavaScript, CSS, React JS
- Database – SQL Server, MySQL, MongoDB
- Machine Learning – Statistical Modelling, Predictive modeling, Supervised and Unsupervised Learning, CNN, Text and Sentiment Analytics, NLP, LLMs, Transformer Models – BERT, YOLO, Vector Database
- Libraries — Pandas, NumPy, Matplotlib, TensorFlow, Scikit-Learn, Statsmodels, NLTK, Spacy, OpenCV, Tesseract, LangChain, Stramlit, OpenAI
- Tools – DevOps, Docker, Kubernetes, Continuous Integration and Continuous Delivery, GitHub, SVN, Jenkins, Bitbucket
- Cloud – AWS
- Project Management – Requirement Gathering, Collaboration with cross-function team members, Agile Methodologies, Mentoring

## EDUCATION

### Indian Institute of Technology–Madras

Advanced Certification (Data Science and Artificial Intelligence)

March 2022 - April 2023

### Centre for Development of Advanced Computing

PG Diploma (Dual Major in Computer Science & Software Development)

August 2016 - February 2017

### Nagpur University

Bachelors in Engineering (Major in Electronics Engineering)

June 2011- July 2015

## EXPERIENCE

### IBM

**Pune, India**

#### Application Developer

March 2020 - April 2023

- Develop NLP model for Contract Document Understanding using OCR data processing for PDF files with name entity recognition, summarization using BERT with an average accuracy of 95% utilizing AWS SageMaker for model deployment and management, integrated with CI/CD pipelines for streamlined development, and employing MLOps practices.
- Build a dashboard to access SercivePortal data for internal business with reduced 80% manual efforts using Python, pandas, FastAPI, and Streamlit.
- Improved Java code to effectively transfer the file data into the database and improved efficiency by 90%.
- Migrated a legacy application to microservice architecture using Java, Maven, Spring-boot, and Cloud as an application framework, Eureka as a Service registry Server, and Ribbon as a Client-Side Load balancer.
- Implemented unit tests and integration tests using JUnit and Mockito to validate the functionality and reliability of the services.
- Developed Jenkins job for automatic package delivery to the client, which saved the manual workload and implemented Swagger for REST API documentation. Deployed on AWS with different environments.
- Utilized AWS services, including EC2 instances for scalable deployment and CloudWatch for monitoring and logging, further improving the application's performance and reliability.
- Integrate code quality tools like CheckStyle and SonarQube to ensure adherence to best practices and enhance the codebase's maintainability.
- Closely collaborated with team members in brainstorming sessions focused on breaking the monolith architecture.
- Mentored interns that transferred to a full-time backend developer role and encouraged them to learn new technologies.

### ZENSAR

**Pune, India**

#### Software Engineer

July 2019 - March 2020

- Developed REST endpoints in Java using Spring Boot for an e-commerce client, enhancing their invoice management system by implementing text classification to categorize invoices, resulting in a 40% performance improvement.
- Contributed to front-end development, creating user-friendly and responsive interfaces with React JS, enhancing user engagement.
- Implemented comprehensive unit tests and integration tests to validate the functionality and reliability of all services.

- Utilizing Docker and GitLab CI/CD, automating deployment processes, and collaborating with the team to ensure scalability.

## **ALIGHT SOLUTIONS.**

### Software Engineer

**Mumbai, India**

March 2019 - June 2019

- Build a standalone system to access reports based on criteria from the MongoDB database for Workday existing applications by reducing conversion time by 70%.

## **MOBITRAIL**

### Software Developer

**Mumbai, India**

May 2017 - February 2019

- Support existing projects to improve new changes and deployment.
- Build end-to-end a HCM project from requirements gathering, structured relational databases, created hierarchy and APIs, and responsive UI pages.
- Utilized Java, Spring, and Hibernate frameworks to ensure robust functionality and efficient performance.
- Implemented JavaScript and jQuery to create dynamic and interactive user interfaces, enhancing user experience and site functionality.
- Focused on bug fixes and feature enhancements, leveraging Java and Spring MVC, Spring Boot.
- HCM template helps to serve products with 2 more different bank clients.
- Led team with new required changes, distributed the work, resolved issues, mentored the team, and maintained pipeline till deployment.

## **CERTIFICATIONS**

- ChatGPT Prompt Engineering for Developers, DeepLearning.AI
- Large Language Models and Langchain, DeepLearning.AI
- Deep Learning Specialization, DeepLearning.AI
- Data Science Foundation I & II, IBM
- Microsoft Certified: Azure Fundamentals, Microsoft

## **ADDITIONAL PROJECTS**

### **Traffic Sign and Traffic Light recognition for Image annotation Tool**

Tools: TensorFlow, OpenCV (CV2), Pandas, NumPy, Matplotlib, YOLOv3,

- Develop Advanced Driver Assistance Systems (ADAS) image annotation tool with CNN transform learning object detection with image, and video data for traffic lights, signal, and pedestrian detection with an average accuracy of 83%.

### **NLP and LLM-based Research Analysis Tool**

Tools: Langchain, OpenAI, Streamlit, Weaviate, Hybrid Search

- Developed LLM-based Chatbot for Research analysis to get relevant responses from specific articles by document upload and URL link using Vector database semantic search

### **College ChatGPT with SQL Server database using OpenAI**

Tools: GPT, Langchain, OpenAI, Streamlit, FAISS, and Prompt Engineering

- LLM Chatbot system for College, Implement OpenAI functionality, internal College database will provide all detailed information about the campus, students fees, and grad with conversation format.

### **Search Engine Application and CI/CD Pipeline using Jenkins**

Tools: Streamlit, Faiss, SBERT (Siamese BERT), Jenkins, Docker, AWS

- Developed a search engine application using Faiss for similarity search, deployed on Streamlit.
- Collected and indexed project descriptions, enabling semantic search via SBERT to increase search accuracy.
- Facilitated quick and efficient search results through cosine-similarity and query indexing with Faiss.
- Built a CI/CD pipeline to automate software delivery for the search engine application.
- Enhanced software quality and release consistency through automation, including code compilation, unit testing, code analysis, security checks, and containerization.
- Unified IT operations and development teams, accelerating code release and maintaining competitive differentiation.