# Krishna Digarse

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LinkedIn | GitHub

## Summary \_

Computer Science student specializing in AI and ML, experienced in building OCR models, PDF chatbots, AI Chrome extensions, and full-stack apps with Spring Boot. Proficient in Python, Java, Spring Boot, React, and TensorFlow with strong problem-solving skills.

# **Projects**

# Handwritten Text Recognition using Optical Character Recognition Model

Tech Stack: TensorFlow, NLP, Python, IAM Dataset

- Built an OCR model with TensorFlow to recognize printed and handwritten text with ~92% accuracy.
- Utilized the IAM dataset (over 1,500 writers and 13,000 lines of handwritten text) for training.
- Incorporated NLP techniques to enhance post-recognition accuracy, reducing text errors by ~15%.
- Implemented preprocessing steps such as image normalization, binarization, and segmentation to improve data quality.

## Local PDF Chatbot using Retrieval Augmented Generation Model

Tech Stack: TensorFlow, PyTorch, Gemma 2B (Local LLM), Python

- Built a Retrieval-Augmented Generation model to answer questions from PDFs with ~90% answer accuracy.
- Integrated document retrieval to fetch relevant sections and a generation module for context-aware answers.
- · Used TensorFlow for implementing and fine-tuning the model, ensuring seamless integration of retrieval and generation components.
- Used Local LLM(Gemma 2B) for better output results.

#### Al Article Summarizer Chrome Extension

Tech Stack: React, Flask, Scrapy, Groq AI API, TailwindCSS

- Built a Chrome Extension using React and Flask to generate AI-based summaries of web articles in real time.
- Integrated Scrapy and Groq AI API to extract and summarize web content dynamically with multi-language support.
- Designed intuitive UI with options to copy, download, and customize summary length for enhanced user experience.
- Implemented backend with Flask and CORS, enabling secure communication between extension and AI summarization model

#### Voting App using Spring

Tech Stack: Spring Boot, Thymeleaf, Spring Security, Hibernate, MySQL, CSS

- Built a full-stack voting application where users can cast votes and admins can securely view detailed results using **Spring Security** for role-based access
- Integrated Hibernate ORM with MySQL for data persistence and designed responsive Thymeleaf templates for a seamless user interface.

#### Skills

- Programming Languages Python, Java, JavaScript, SQL, HTML, CSS
- Frameworks & Libraries Spring Boot, Spring Data JPA, Spring Security, Flask, FastAPI, TailwindCSS, Tensorflow, PyTorch
- Databases MySQL, MongoDB
- Tools & Technologies Git, GitHub, Docker, AWS, Maven, Gradle
- Core Competencies RESTful API Development, Microservices, Machine Learning, Artificial Intelligence, Full-Stack Web Development, Object Oriented Programming (OOP), Data Structures and Algorithms (DSA)
- Soft Skills Teamwork, Decision Making, Critical-Thinking, Problem-Solving, Adaptability.

### Education

#### Bachelors of Technology, School of Information Technology, RGPV | 7.27

Bhopal, MP, India

2026

• Major in Computer Science Engineering with specialization in Artificial Intelligence and Machine Learning.

#### Higher Secondary Education, Lala Kailashpat Singhania High School | 78.4%

Sausar, MP, India

2022

• Completed higher secondary education with a strong academic foundation in Physics, Chemistry, and Mathematics PCM with minors in Computer Science

# Certifications

- Python Certification from Udemy: Covered functions, OOP, file handling, web scraping and more.
- Machine Learning A-Z from Udemy: Trained ML models using regression, classification, clustering, and more.