# **ROHAN MOVALIYA**

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#### **OBJECTIVES**

Aiming to leverage expertise in AI/ML, Python development, and problem-solving to design intelligent solutions that drive innovation and business growth. I am seeking challenging opportunities where I can contribute to impactful projects while continuously advancing my technical skills in emerging technologies.

#### **WORK EXPERIENCE**

# AI/ML - Python Developer, Tridhya Tech Limited

Nov 2024 - Present

- Utilized Python frameworks such as DRFs, Flask and FastAPI to build and deploy robust Alpowered APIs and web applications.
- Automated data pipelines and implemented data preprocessing techniques for optimal model performance.
- Developed, tested, and deployed scalable AI/ML models to solve complex business problems.
- · Collaborated with cross-functional teams to deliver intelligent solutions tailored to client requirements.

# Python Intern, Bizzappdev Systems Pvt. Ltd.

Jul 2023 - Dec 2023

- Developed and Maintained business applications using Odoo framework.
- Wrote efficient and scalable code in Python for various modules.
- Collaborated with the development team to troubleshoot and resolve issues.

# **EDUCATION**

<b>Bachelor of Technology in Information Technology</b> Silver Oak University	2021 - 2025 <b>9.91 CGPA</b>
Higher Secondary Certificate SVP Secondary & Higher Secondary School	2020-2021 <b>77.84</b> %
Secondary School Certificate Shree Bhojalram Vidyalaya	2018-2019 <b>81.17</b> %

## **SKILLS**

- Programming Languages: Python (Django REST Framework, FastAPI, Flask)
- Data Analysis & Processing: NumPy, Pandas
- Data Visualization: Matplotlib, Seaborn, Plotly, Streamlit, Power Bl
- Machine Learning: Supervised and Unsupervised Learning, Model Evaluation, Feature Engineering
- Deep Learning: CNNs, RNNs, LSTMs, Transformers, Transfer Learning, Model Optimization
- Natural Language Processing: Text Preprocessing, Embeddings, Applications
- Generative AI: Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), LangChain, Model Fine-tuning, Vector Databases (FAISS, ChromaDB), Al Agents & Automation
- Version Control & Deployment: Git, GitHub, Docker, Linux
- Tools & Utilities: Postman

#### **PROJECTS**

## **AI-Powered Messaging Application**

- Developed a full-stack messaging platform supporting user registration, friend requests, oneto-one and group chats, and media sharing.
- Integrated real-time messaging with Django Channels and implemented facial authentication using OpenCV and deep learning-based face recognition.
- Built an automated spam detection system using NLP techniques to flag inappropriate or unwanted messages.
- Technology Used: Django, FastAPI, PostgreSQL, OpenCV, Scikit-learn, Face Recognition

# **AI-Based Price Suggestion for Fashion Products**

- Developed an Al-powered price suggestion system that predicts product prices based on image analysis and online market trends.
- Integrated Google Vision API to extract dominant colors, object labels, and fashion attributes from images and automated web search using Selenium WebDriver to fetch pricing details from e-commerce platforms.
- Built a FastAPI-based backend to provide real-time price predictions via a REST API.
- Tech Stack: Python, FastAPI, Selenium, Google Vision API

#### **Plant Leaves Disease Prediction**

- Developed a deep learning model to identify and classify diseases across 18 plant species with 38 disease categories using a dataset of 54,359 images.
- Achieved 86% accuracy using a Neural Network and 83% accuracy using Transfer Learning (MobileNet).
- Working on improving accuracy through hyperparameter tuning, data augmentation, and advanced architectures.
- Technology Used: TensorFlow/Keras, Python, OpenCV, and Streamlit

#### **Biometric Authentication Using Dorsal Vein Recognition**

- Captured high-quality thermal images and optimized acquisition conditions for consistent results.
- Implemented YOLOv5 to accurately detect and segment the Region of Interest (ROI) for vein pattern extraction.
- Implemented image preprocessing techniques such as CLAHE, Gaussian Blur, and Otsu's thresholding for noise reduction and binarization.
- Enhance the system by expanding dataset diversity, integrating deep learning-based segmentation models, and improving robustness against environmental variations.
- Technologies Used: YOLOv5, OpenCV, PyTorch and high-resolution infrared cameras.

#### **COURSES OR PROFESSIONAL DEVELOPMENT**

## 100 Days of Code: The Complete Python Pro Bootcamp

- Udemy | January 2024
- Developed a strong foundation in Python programming, covering topics such as web development, data science, automation, and more. Completed 100 days of hands-on projects and coding exercises.