Khushbunaz Dalal

Artificial Intelligence/Machine Learning Engineer

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SUMMARY

Results-driven AI/ML Engineer with a strong foundation in machine learning, deep learning, and AI-driven solutions. Experienced in data preprocessing, model training, and AI deployment. Passionate about building intelligent systems that drive business impact. Skilled in Python, PyTorch, TensorFlow, and AI model optimization.

EDUCATION

Bachelor of Engineering in Computer Science, LJ University | Sep '21 — May '25
Ahmedabad, India

PROFESSIONAL EXPERIENCE

Python and Machine Learning Intern — Nov '24 — Present
BrainyBeam Technologies Pvt. Ltd. — Ahmedabad, India
- Designed and optimized machine learning models for predictive analytics.
- Conducted feature engineering and data preprocessing for enhanced accuracy.
- Improved model performance by tuning hyperparameters and using ensemble learning.

Python Developer Intern — Nov '23 — Mar '24
Oceanmtech Pvt Ltd — Ahmedabad , India
- Developed AI-powered web applications using Flask and Python.
- Worked on data pipelines and API integration for ML model deployment.
- Optimized Python scripts for faster computation and efficiency.

Python Developer — Oct '22 — Present
Freelancer — Ahmedabad, India
Automated 3D modeling using Blender Python API for AI-driven design optimization.
Developed AI-based Telegram bots for workflow automation.
Debugged and optimized chatbot algorithms for better user interactions.

PUBLICATIONS

"Enhanced Movie Recommendation Systems: Integrating Collaborative Filtering with Content-Based Approaches for Improved User Experience" — **Feb '25**
International Journal of Innovative Research in Computer Technology (IJIRCT)
Publication Link: IJIRCT Paper
This research explores hybrid movie recommendation systems by integrating collaborative filtering with content-based approaches. It addresses data sparsity, optimizes similarity metrics, and incorporates metadata-driven enhancements to improve recommendation accuracy. The study leverages machine learning techniques, including cosine similarity, demographic filtering, and sentiment analysis, to refine user preferences and enhance personalization in modern recommendation engines.

PROJECTS

Heart__Disease__Prediction Link
- Developed a heart disease prediction model using machine learning classification techniques (SVM, Random Forest).
- Leveraged Matplotlib and Power BI for advanced data visualization and insights.

AI-Powered-Desktop-Application Link
- Built a Tkinter-based AI-powered application for automated student record management.
- Implemented OCR and NLP-based document classification for enhanced searchability.

Restaurant_Management_System Link
- Built a console-based system in Java for efficient order management using ArrayDeque.
- Ensured persistence and user interaction through robust file operations.

Fashion_Recommendation_System Link
- Built a personalized fashion recommendation system using collaborative filtering and content-based approaches.
- Used Scikit-learn, Pandas, and Flask to deploy an interactive AI-driven recommendation model.

LeadGenius_Scraper Link
- Automated Web Scraping: Extracts key business data from multiple sources.
  Data Cleaning & Deduplication: Ensures high-quality, unique leads.

SKILLS

Programming   Python, Java, C, JavaScript
Web Development   HTML5, CSS3, ReactJS, Node.js, Django, Express.js
Data Science & Analytics   Pandas, Scikit-learn, Power BI, NumPy, Feature Engineering, Data Preprocessing
Database Management   MySQL, MongoDB
Tools   Blender, Flask, Tkinter
AI & Machine Learning   Deep Learning (TensorFlow, PyTorch), Computer Vision, NLP

CERTIFICATIONS

Microsoft Certified Azure AI Fundamentals, Microsoft Learn Student Ambassadors

Exploratory Data Analysis For Machine Llearning, Coursera

Building Generative AI-Powered Applications with Python, IBM

Data Structure, Coursera

HTML,CSS and JavaScript for Web Developers, Coursera

ACHIEVEMENTS

Freelancing
Successfully managed multiple freelance projects, receiving excellent client feedback. Achieved measurable improvements in predictive modeling and application development efficiency.

NASA Hackathon Participant
NASA
Participated in a NASA-sponsored hackathon, developing a prototype for efficient data visualization in space exploration.

VOLUNTEERING

AI/ML Research Volunteer, Omdena
Remote
Mar '25 — Present

Contributing to the "Automating Digital Document Indexing" project.
Applying NLP, OCR, and Machine Learning to automate document processing.
Collaborating with global AI experts to build an open-source AI solution