Dhairya Patel

AI Software Developer

SUMMARY

- AI Software Developer with 2+ years of experience in building machine learning models and deploying AI solutions. Skilled in Python, PostgreSQL, and NLP with expertise in scalable backend systems and optimizing data processing pipelines.
- Strong background in **data analysis**, and ETL. Design **RESTful APIs** with **Postman** and **Docker**, ensuring reliability through unit testing. Demonstrated ability to deliver high-performance, real-time apps that drive accuracy & efficiency in AI projects.

SKILLSET

- Programming Languages: Python, JavaScript, R, HTML, CSS, SQL
- Data Infrastructure: PostgreSQL, MongoDB, Neo4J, Hadoop, Spark, Hive, AWS (EC2, S3, RDS), ETL, Data Warehousing
- Software Knowledge: JIRA, Postman, Git, Jenkins, Docker, Tableau, PowerBI, Agile methods (Scrum, Kanban), SDLC, SAS
- AI/ML: Regression, SVM, KNN, Recommendation Systems, Ensemble Models, Clustering, NLP (Text Processing, Sentiment Analysis, spaCy, NLTK) TensorFlow, PyTorch, scikit-learn, CNN, Neural Networks, OpenCV, Image Processing
- Soft Skills: Communication, Problem-Solving, Project Management, Business Acumen, Leadership & Teamwork

PROFESSIONAL EXPERIENCE

AI Software Developer Intern | Mealmate ai

February 2025-Present | Los Angeles, CA (Remote)

- Manage AWS infrastructure migration (EC2, RDS, S3), ensuring continuous delivery & optimizing system Performance.
- Implement LanceDB to improve hybrid search in the food database, enhancing query performance.
- Contributed to developing a meal recommendation system using EASE/SVD algorithms and ChatGPT API for insights.
- Designed RESTful APIs and workflows using Postman, PostgreSQL, and Docker, ensuring reliability with unit tests.

Graduate Research Assistant | Loyola Marymount University

January 2023-January 2025 | Los Angeles, CA

- Developed and maintained KPI dashboards using Excel and SQL to track on website performance and user metrics for 50k+ users.
- Assisted in data analysis and search query optimization, which improved by 30% in website functionality and user experience.
- Performed SQL-based data analysis to enhance student database by removing duplicates & improving data integrity.
- Analyzed website performance with Siteimprove and Google Analytics, optimizing and resolving technical issues.
- Created interactive Tableau dashboards for executive presentations, highlighting 10+ key business insights and trends.

Data Science Intern | VNuture Technologies

January 2022-June 2022 | Ahmedabad, India

- Supported in developing automated pipeline for ETL process from multiple sources into single database platform.
- Conducted EDA on 100K+ data points using Python, SQL, and Tableau to uncover actionable insights for business decisions.
- Leveraged supervised and unsupervised learning algorithms for classification, clustering and anomaly detection.
- Collaborated with a team of 5 developers to monitor and assess ML model performance metrics, such as accuracy, precision, and recall, and ensure code quality and functionality.

PROJECTS

News Authenticity Analyzer

- Built an ML-powered app in Flask & Python to classify news legitimacy with 98% accuracy through ensemble models.
- Designed and implemented a backend API in Flask to serve trained models and handle real-time data processing.
- Integrated web scraping & NLP pipelines to collect and process news data, improving model performance.

Driver Drowsiness Detection System

- Developed a real-time drowsiness detection with CNN model and facial landmark tracking, achieved 93% in detection.
- Built an intuitive user interface with Python and OpenCV to integrate webcam functionality for real-time monitoring.
- Deployed the system in real-world conditions, optimizing for low-latency and reducing false positives by 45%.

Flight Booking System with Alexa Integration

- Created a flight booking system with NodeJS (backend), MySQL (database), & Alexa (voice) for user experience.
- Architected RESTful APIs to enhance user interactions, while enabling scalability for future growth.
- Optimized cloud deployment for seamless scaling and improved performance under higher traffic loads.

Arrow Visa & Immigration System

- Led the backend for a visa support platform, crafting RESTful APIs for user registration and query with Python and SQLite.
- Integrated front-end components (HTML, CSS, JavaScript) with the backend to ensure seamless user interactions.

EDUCATION

Loyola Marymount University

January 2023-December 2024 | Los Angeles, CA

Master of Science in Computer Science

GPA-3.76/4.0

Coursework – Agile Methodologies, ML, Data Science & Analysis, Database Systems, Deep Learning

Gandhinagar Institute of Technology, Ahmedabad, India

June 2018-June 2022 | Ahmedabad, India

GPA-3.9/4.0

Bachelor's in Computer Engineering

CERTIFICATES

• App academy - Software Engineering. Coursera - Machine Learning with Python, Deep Learning & NN with Keras