

Mahaveersinh Chauhan

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Objective

Results-driven AI/ML Developer with 4+ years of experience in designing, developing, and deploying cutting-edge machine learning solutions. Proven expertise in deep learning, NLP, computer vision, and large-scale data processing. Strong proficiency in Python, TensorFlow, PyTorch, and cloud-based ML services. Passionate about leveraging AI to drive business impact.

Skills

- **Programming:** Python, TensorFlow, PyTorch, Scikit-learn, OpenCV, SQL/NoSQL, JavaScript, C++
- **Machine Learning:** Supervised & Unsupervised Learning, Deep Learning, NLP, Data Science, Generative AI
- **Big Data & Cloud:** AWS (SageMaker, Lambda, S3), Google Cloud AI, Spark, ETL Pipelines, Kafka
- **Development Tools:** Docker, Git, CI/CD, Jupyter Notebook, Databricks, REST API
- **Databases:** MySQL, PostgreSQL, MongoDB, Microsoft SQL Server
- **Frameworks & Libraries:** Transformers, FastAPI, Flask, Pandas, NumPy, Matplotlib, Plotly, ReactJS, LangChain, RAG
- **MLOps & Deployment:** Model Optimization, Model Monitoring, Flask/FastAPI Deployment, Grafana, Prometheus

Experience

Senior Python Developer – Sinasam Inc.

May 2024 – August 2024

Toronto, Ontario, Canada

- Built and deployed backend services for an AI conversational system using FastAPI and LangChain, integrating multiple autonomous agents with seamless API endpoints.
- Implemented MongoDB-based dynamic data retrieval with vector search (FAISS), ensuring low-latency responses and scalable backend performance.
- Designed persistent session management and optimized request handling through prompt engineering and structured pipelines, enhancing reliability of user interactions.

Senior Python Developer – AZOCA Technologies LLP

September 2021 – April 2024

Gandhinagar, Gujarat, India

- Developed backend architecture using FastAPI, creating RESTful APIs for chatbot and computer vision systems with efficient database integration and real-time response handling.
- Designed and deployed MLOps pipelines with CI/CD automation on AWS SageMaker, integrating model endpoints with backend APIs for production use.
- Led development of a currency detection system (YOLOv5), building Python-based services to handle inference requests and improving overall detection accuracy by 20%.
- Architected facial comparison services using Python, resulting in a 30% accuracy boost while ensuring scalable deployment through containerized APIs.
- Collaborated with cross-functional teams to build modular, reusable Python libraries for data preprocessing and model inference pipelines.

Python Developer – CREAR Electronics PVT LTD

May 2020 – May 2021

Ahmedabad, Gujarat, India

- Integrated Alexa, Google Home, and Apple HomeKit into smart switches using Python SDKs and REST APIs.
- Built an end-to-end IoT data pipeline using AWS IoT Core, Lambda, and DynamoDB, enabling real-time data collection, preprocessing, and API access.
- Optimized data storage and retrieval processes, achieving a 50% reduction in overhead and improving backend efficiency.

Projects

Amazon Product Recommendation

- Developed and deployed a Collaborative Filtering-based product recommendation system using AWS S3, Lambda, SageMaker, API Gateway, Azure Databricks, and Snowflake for end-to-end data processing, model training, and deployment.
- Built a React.js frontend and FastAPI backend to deliver personalized recommendations through a scalable REST API integrated with the SageMaker inference endpoint.

Toronto Transit Commission (TTC) Delayed Bus Analysis

- TTC is a public transport provider in Toronto, Canada, responsible for operating buses, street cars and subways throughout city. Project aims to analyze data of bus delayed and forecast future delays using time series analysis.

Education

Graduate Certification in Artificial Intelligence and Machine Learning

January 2023 – August 2024

Lambton College, Toronto, Canada

Bachelor Degree In Information Technology (IT)

September 2016 – July 2020

LDRP Institute of Technology and Research, Gujarat, India

Honors & Certifications

- **AWS Certified Developer - Associate** (AWS – Issued on June 2024)
- Published research paper named “Enhancement of vehicle Behavior System” in Volume-9-issue-1 in October 2019 in International Journal of Engineering and Advanced Technology (Scopus Journal).