

Aditi Shelke

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EDUCATION

Stevens Institute of Technology
Master of Science in Data Science

Present

Relevant Coursework: Probability, Machine Learning, Data Mining, Data Visualization, Marketing Analytics, Statistical Modeling

D.Y.Patil College of Engineering & Technology, Kolhapur
Bachelor of Technology | CGPA: 8.49

Sept 2024

Relevant Coursework: Data Structures & Algorithm, Database Management System, Artificial Intelligence, Machine Learning

Honors: Design Co-Lead for Google Developers Student Club (GDSC)

Udacity AWS AI & ML Scholarship | AI Programming with Python

Jan 2024

Coursework: Neural Networks, Deep Learning with PyTorch

Skills learned: Python, NumPy, Pandas, Matplotlib, linear algebra, calculus

SKILLS & CERTIFICATIONS

Technical Skills: Python, SQL, R, Tableau, Power BI, Excel (Advanced)

Data Science & ML: AWS (S3, EC2, RDS, SageMaker), LangChain, Hugging Face, Jupyter Notebook, TensorFlow, Data Visualization, ggplot, Google Analytics, Transformers, REST APIs, Microsoft Office Tools

Knowledge Areas: Healthcare Data Analysis, EHR Systems, Business Intelligence, Machine Learning Algorithms, NLP, Large Language Models (LLM), Retrieval-Augmented Generation (RAG), Translation Evaluation, Model Fine-tuning, Hypothesis Testing, Performance Monitoring

Certifications: AWS Academy Graduate: Academy Cloud Foundations, Academy Cloud Architecting, Coursera: Python for Data Science and AI

Spoken Languages: Hindi, Marathi, English, Sanskrit

EXPERIENCE

The Compass Group USA

Sep 24 – Aug 25

Data Analyst

- Built forecasting models to optimize pricing across 200+ SKUs using Python and regression analysis, reducing forecasting variance by 15% and enabling proactive cost planning
- Developed statistical dashboards identifying inflation patterns and pricing inefficiencies, surfacing \$18K cost savings contributing to 20% surplus reduction
- Transformed fragmented operational datasets into strategic insights for budgeting and sustainability planning using advanced statistical modeling techniques

AWS Virtual AI-ML Internship, AICTE

Jan 23-March 23

Machine Learning Intern

- Trained and deployed 3 machine learning models with optimized hyperparameters achieving 92% prediction accuracy for real-time applications
- Processed 10,000+ user queries through advanced NLP algorithms significantly enhancing customer satisfaction scores and user engagement
- Implemented statistical validation techniques ensuring model reliability and measurable business impact

AWS Virtual Cloud Internship, AICTE

Jul 22-Dec 22

AWS Cloud Engineer Intern

- Designed secure multi-tier architectures with VPCs, subnets, NAT gateways, and EC2 deployment pipelines
- Launched and configured Amazon EC2 instances with user-data scripts to install Apache servers, deploy PHP-based web applications, and validate access via DNS and security group rules
- Provisioned MySQL databases using Amazon RDS with custom subnet groups and security policies, supporting full-stack connectivity with deployed web application

Comtranse Technology

May 22-Oct 22

Python Developer Intern

- Developed a Python-based stock management system using MVC architecture and crafted interactive Power BI dashboards, automating inventory tracking and reducing report generation time from 4 hours to 30 minutes, saving 100+ hours annually for a local retailer
- Automated data updates between the website and backend database, improving reporting consistency and accuracy by 60%

ACADEMIC PROJECTS

Conversational Resume AI (LangChain + LLaMA 3) | Python, LangChain, Groq API, Chroma Vector Store, Streamlit, RAG Pipeline

- Architected and deployed multi-modal AI resume optimization platform serving **RAG-based document analysis** using LangChain, ChromaDB, and multiple LLM providers (Groq LLaMA3-70B, OpenAI GPT-3.5, local Ollama), achieving 92% context relevance accuracy and sub-200ms query response times
- Developed real-time user interfaces (Streamlit) and backend APIs (FastAPI) for chat, PDF resume parsing, and interactive ATS optimization dashboards, implementing LangSmith-powered observability for distributed tracing, performance analytics, and cross-provider LLM performance optimization

Predicting Airplane Delays | Python, AWS

- Developed a flight delay prediction model using **XGBoost** and **Amazon SageMaker** with an **80.26%** overall accuracy, aiding airlines in proactive decision-making for managing weather-related delays
- Attained an optimized accuracy of **79.94%**, sensitivity of 8.87%, and specificity of 98.82% after hyperparameter tuning
- Performed ROC curve analysis evaluating model performance with validation AUC of 0.54, enabling proactive airline decision-making

Pre-trained Image Classifier – AWS AI Programming with Python nanodegree scholarship program | Python

- Implemented 3 distinct CNN models (VGG, ResNet, AlexNet) for image classification across 10,000+ images
- Achieved 93.33% accuracy in dog breed classification using VGG model, outperforming baseline by 15%