

Anamay Deshpande

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WORK EXPERIENCE

- AvTech Solutions – Data Scientist** (Indianapolis, IN) October 2024 – Present
- Built an AI-powered matching system with Sentence-BERT embeddings and Pinecone vector db, enabling semantic similarity searches between resumes & job descriptions, boosting candidate retrieval accuracy by 30%
 - Devised a filtering and scoring pipeline with MySQL for metadata extraction and cosine similarity in Pinecone, automating resume ranking via a weighted match score and reducing screening time by 40%
 - Currently designing a RAG-based interview assistant to generate context-aware technical screening questions, evaluate responses and summarize interviews for recruiters, targeting a 60% reduction in screening time
- Bold Street – Data Scientist** (Phoenix, AZ) December 2023 – October 2024
- Developed & deployed predictive models in Python for residential property valuation, implementing feature engineering and data wrangling techniques on high-dimensional datasets, achieving 4% mean absolute error
 - Automated blog generation by deploying a RAG-based pipeline utilizing ChromaDB, reducing blog creation time by 75% and generating 200+ query-driven blogs to increase social media engagement & brand visibility
 - Designed end-to-end data pipeline in MongoDB, incorporating data filtering & aggregation techniques, resulting in an 11% reduction in processing time, allowing for faster & more accurate data insights
 - Trained image classification models for edge devices using TensorFlow Lite, achieving 84% accuracy and 80% reduction in inference time, enabling faster deployment on resource-constrained devices
- Accenture – Application Development Associate** (Pune, India) June 2021 – July 2022
- Optimized CI/CD pipelines by automating unit, integration and regression tests using UFT and Jenkins, accelerating defect resolution and reducing deployment failures in agile sprints by 20%
 - Revamped financial data migration from legacy systems by writing complex SQL queries for validation, deduplication and anomaly detection, ensuring 100% accuracy in transferring 1M+ transaction records
 - Created client-facing dashboards in Power BI & Excel to track project milestones, defect trends and resource utilization, reducing project delays by 15% and enabled stakeholders to proactively address bottlenecks
- Inteliment Technologies Pvt. Ltd. – Data Scientist** (Pune, India) January 2021 – June 2021
- Enhanced image classification model performance by 3% using PyTorch with ResNet & VGG architectures, applying architecture tuning, data augmentation & regularization techniques to reduce overfitting
 - Built an object detection model for traffic monitoring, using OpenCV and OCR libraries to achieve 80% accuracy in number plate identification & extraction, enabling vehicle identification in real-time systems
 - Evaluated and implemented GPT-2 for text generation tasks, increasing the BLEU score by 5% and improving the model's ability to generate coherent, contextually accurate text based on large-scale pretraining
 - Integrated SHAP into image recognition models for model interpretability, analyzing pixel-level contributions of a 16-layer, ImageNet-trained CNN and increased transparency for end users

PROJECTS

- LLM-Powered Resume Evaluation & Comparison Web App** January 2025
- Developed Streamlit-based web app to analyze resume-job description compatibility using 6 different LLMs (GPT-3.5, Gemini, LLaMA etc.), providing feedback on missing keywords, relevance & suggested improvements
 - Constructed an LLM comparison feature, exposing up to 15% variance in match scores across models
- Evaluating & Optimizing Ensemble Models for Real-Time Fraud Detection** October 2023
- Trained ensemble of models for auto-insurance fraud detection with 82% accuracy using AWS SageMaker, incorporating S3 for data storage and deploying models via SageMaker endpoints for scalable inference
 - Integrated model with AWS API Gateway and Lambda to enable real-time fraud detection via REST API

EDUCATION & CERTIFICATIONS

- Stevens Institute of Technology - Master of Science in Business Intelligence & Analytics** December 2023
- Manipal University Jaipur - Master of Science in Business Intelligence & Analytics** May 2021
- Microsoft Certified:** Azure Data Scientist Associate (DP-100) (Credential ID: ED7AE373991E5629) December 2024
- HashiCorp Certified:** Terraform Associate (003) (Credential ID: 643cbc30-758f-4a94-bffe-de74ff0f3e0d) February 2025

SKILLS

Programming & Databases: Python, R, SAS, Bash, Git, MySQL, PostgreSQL, MongoDB, Snowflake, Spark, Hadoop
Machine Learning & AI: Scikit-Learn, TensorFlow, PyTorch, OpenCV, Hugging Face, PCA, Time Series, LLMs
Data Visualization, Cloud & DevOps: Tableau, Looker Studio, MLFlow, AWS, GCP, Azure, Docker, Kubernetes