Mourya Sashank Sure

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Github LinkedIn Medium Portfolio

Summary

Accomplished AI Specialist and Data Scientist with 3+ years of experience designing and deploying advanced AI/ML solutions, including Generative AI, Conversational AI, Computer Vision, and predictive analytics, across sectors such as healthcare, public services, and CRM. Expertise in leveraging cloud platforms (AWS, Azure, GCP) and frameworks like PyTorch, Keras, and TensorFlow to drive innovation and enhance efficiency by up to 40%. Proficient in managing the entire project lifecycle, from data ingestion to deployment, utilizing AWS SageMaker and Azure ML, and adept at creating impactful visualizations with Tableau and Power BI. Proven ability to develop comprehensive Business Requirement Documents (BRDs), Standard Operating Procedures (SOPs), and process flows, aligning IT solutions with strategic business goals. Recognized for delivering client-facing solutions, and consistently achieving 95%+ accuracy in predictive models and AI-driven systems.

Technical Skills

Methodologies: SDLC, Agile, Waterfall

Cloud Platforms:

AWS: Lambda, Glue, Redshift, Data Bricks, CloudWatch, DynamoDB, S3, EC2, SageMaker

Azure: Azure Data Factory, AI Search, Azure ML, Function App, Blob Storage, Cosmos DB, Azure DevOps

GCP: BigQuery, Cloud Run Functions, Vertex AI, Dialogflow CX, CCAI, Cloud Storage

Programming Languages: Python, R, SQL, JavaScript

Data Visualization Tools: Tableau, Power BI (DAX, Power Query), Matplotlib, Seaborn, Plotly, Advanced Excel (Pivot Tables, VLOOKUP)

Machine Learning Frameworks: PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face, MLflow

AI/ML Technologies: Conversational AI, Computer Vision (OpenCV, YOLO, SOTA models), NLP (BERT, Transformers, LLM), Generative AI

Databases: MySQL, NoSQL (Cosmos DB, MongoDB), Snowflake, Redis

Automation Tools: UiPath, Automation Edge

Big Data Tools: PySpark, Hadoop, ETL/ELT

Development Tools: Git, GitHub, Bitbucket, Docker, Kubernetes, CI/CD, Jira, Microsoft Visio, RTM

Other Tools: JMeter, Pytest, Flask, Node.js, Dashboards

Experience

UVS InfoTech Laurel, MD

AI Specialist and Data Scientist *September 2024 – Present*

- Interactive voice-enabled AI agent:
  Built an Alexa Skill to provide real-time answers to user queries using client data (e.g., uptime, downtime of the websites, schedules, weekly reports, Walking through SOPs, and Process Flows).
  Leveraged Azure Blob Storage for unstructured data and Azure Cosmos DB for structured feedback storage.
  Implemented Azure AI Search for data indexing (RAG) and Azure OpenAI for generative responses, achieving 95% accuracy in query resolution.
  Integrated BERT-based semantic similarity for model retraining and tested functionality using JMeter and Pytest.
  Hosted the solution on Azure Web App and integrated with Alexa Skill for interactive voice-based responses, improving user satisfaction by 25%.
- Conversational AI for Automated Customer Support:
  Designed and deployed a Dialogflow CX and Vertex AI-based conversational agent capable of handling complex user queries such as password resets and appointment scheduling.
  Automated backend processes using UiPath, interfacing with Firebase to securely manage user data.

Integrated cloud logging and real-time data analysis with GCP BigQuery, providing KPIs and actionable insights to stakeholders.

Reduced the need for human reception staff by 30%, enabling 24/7 service availability.

- Multilingual Real-Time Translation System:

  Built an advanced real-time translation system integrating Dialogflow CX with Telnyx and Google APIs, achieving 90% accuracy in translating multiple languages, including Spanish, Hawaiian, and Mandarin.

  Utilized CCAI to manage seamless communication flows between officers and non-English speakers.

  Enhanced accessibility and operational efficiency in multicultural interactions, reducing communication delays by 40%.

University of Maryland Baltimore County (UMBC) Baltimore, MD

AI Research Assistant *August 2023 - May 2024*

- Advanced Predictive Modeling for Academic Enrollment:

  Led the development of a machine learning initiative to forecast enrollment trends for UMBC's Master's programs, employing advanced statistical techniques and deep learning algorithms.

  Optimized data storage and processing using SQL and integrated Snowflake cloud data warehousing solutions, enhancing data accessibility and reliability.

  Achieved a 20% improvement in data utilization for academic planning and a 15% increase in student satisfaction by providing accurate, data-driven insights into course demand and capacity management.

Cognizant Technology Solutions Hyderabad, India

Data Engineer *February 2021 – August 2022*

- Disfluency Detection for Speech-to-Text AI Agent:

  Built an advanced AI-driven speech-to-text conversion system using librosa for audio processing and AWS Lambda for scalable data handling, achieving 95% accuracy in transcribing and analyzing speech disfluencies.

  Developed a ResNet-based model to identify and analyze speech disfluencies, reducing disfluency detection errors by 30% and enabling future integration with a human-like AI robot for natural language responses.

  Designed and implemented a comprehensive data visualization dashboard in Power BI, utilizing DAX to create metrics for speech length, disfluency count, and accuracy, improving data analysis efficiency by 25%.

  Enhanced model performance monitoring through dynamic reports featuring time series graphs, histograms, and heatmaps, driving continuous improvement efforts and increasing model accuracy by 15% over 3 months.

SASTRA's Technology Business Incubator Thanjavur, India

AI Research Assistant *February 2019 – January 2021*

- UGV-Based Cotton Harvester Enhancement Project:

  Spearheaded a research project to enhance cotton harvesting efficiency using an Unmanned Ground Vehicle (UGV) equipped with advanced perception and navigation capabilities.

  Integrated Python, MATLAB, and IoT to develop machine learning algorithms and computer vision techniques, including YOLO for object detection and DarkFlow/SLAM for spatial navigation.

  Improved operational efficiency by 20% and streamlined data model documentation, reducing time-to-deployment by 20%.

  Exceeded initial efficiency goals, setting a new standard for agricultural automation at the incubator.

Publications

3D CNN Based Emotion Recognition Using Facial Gestures April 2022

Teja K S S, Reddy T V, Sashank M, Revathi A (2022, April). Springer

Certifications

UiPath Certified Professional Automation Developer Professional Certification

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