

Lekhashree Honnavalli Jayarama

Data Scientist

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Summary

Data Scientist specializing in machine learning, deep learning, and generative AI. Build scalable AI solutions and data pipelines across AWS, GCP, and Azure. Experience in computer vision, IoT-driven ML, and translating complex data into actionable insights. Published researcher focused on applied AI.

Skills & Certifications

- **Programming & Analysis:** Python, SQL, R, NumPy, Pandas, PySpark, Seaborn, Data Wrangling
- **Data Visualization & Tools:** Tableau, Power BI, Plotly, Matplotlib, ggplot2, CMS Dashboards, Git, GitHub
- **Machine Learning & AI:** TensorFlow, PyTorch, Keras, Sklearn, SciPy, Deep Learning, NLP, Generative AI (LLMs, RAG, Fine-tuning), MLOps
- **Cloud, Big Data:** AWS, Google Cloud, Hadoop, Spark, DBMS
- **Process Excellence:** QSM, KPI Tracking, Continuous Improvement, Benchmarking, Root Cause Analysis (RCA)
- **Certifications:** Python, Artificial Intelligence (IBM), Machine Learning, MATLAB

Education

University of Arizona, MS in Data Science, GPA: 4.0/4.0 Tucson, AZ, USA | Aug 2024 - Dec 2025
MS Ramaiah Institute of Technology, BE in Electronics, GPA: 3.75/4.0 Bangalore, KA, India | Jul 2019 - May 2023

Experience

AI Engineer, Myelin Foundry Bangalore, KA, India | Mar 2023 - Jul 2023

- Designed and deployed computer vision pipelines improving low-light detection accuracy by 25% and reducing deployment defects by 30%, enabling scalable edge AI integration.
- Built AI-powered driver analytics with KPI tracking, streamlining workflows to achieve 20% faster delivery and enhancing collaboration with engineering teams.

AI Research and Development Intern, Queen's University Kingston, ON, Canada | Jul 2022 - Nov 2022

- Developed predictive models that improved forecast accuracy 18% and reduced preprocessing errors 35% by applying advanced statistical techniques.
- Streamlined AI research pipelines with PhD collaborators, accelerating project timelines by 25% through efficient data science workflows.

Projects

Violence Detection in Drone Surveillance Videos

- Achieved 85% classification accuracy by training a 3D CNN on drone footage for violence detection.
- Optimized deployment on NVIDIA Jetson Nano, reducing inference latency 30% for real-time edge analytics.

Development of a Non-Intrusive Apiary Management System Using IoT and ML

- Built IoT + ML pipelines monitoring hive conditions and analyzing comb images with 95% accuracy.
- Delivered real-time cloud dashboards, cutting processing overhead 25% and reducing manual inspections 40%.

Walmart Sales Data Analysis

- Analyzed sales trends with MySQL and Tableau, increasing customer engagement 15% and overall sales 10%.
- Automated KPI monitoring, reducing reporting time 20% and driving faster business decisions.

Nutrition Data Analysis using EDA

- Applied EDA in Python and SQL to provide personalized dietary recommendations, boosting client health outcomes 20% and business engagement 15%.

Publications

- Violence detection in Drone Surveillance Videos using CNN. SmartCom, 2023
- Application of Machine Learning Models in the Supervision of Apiculture. ICARES, 2022