laharikarrotu24@gmail.com

+1 (321) 234-6914 Vacaville, CA

EDUCATION

Master's in Computer Science, Florida Institute of Technology GPA: 3.5/4.0 | 2022 – 2024

Coursework: ML, DeepLearning, NLP, Computer Networks, Data Analytics

Bachelor's in Computer Science, KL University, India GPA: 8.9/10 | 2018 – 2022

Coursework: DSA, AI, RDBMS, Computer Vision, Distributed Systems

TECHNICAL SKILLS

Programming: Python, SQL, PySpark, R, JavaScript, TypeScript, Java

AI/ML & NLP: TensorFlow, PyTorch, Hugging Face, LangChain, OpenAl API, BERT, XGBoost, LightGBM, Recommender Systems, Computer Vision, RAG, Generative AI

Cloud & MLOps: AWS (SageMaker, Lambda, Glue, Redshift), Azure (Data Factory, Synapse, Cognitive Services, App Service), GCP (Vertex AI, BigQuery, Firebase), MLflow, Kubeflow, Docker, Kubernetes, Terraform, CI/CD

Data Engineering: Spark, Databricks, Kafka, Airflow, Snowflake, Delta Lake, dbt, ETL/ELT Pipelines

Databases: Mysql, PostgreSQL, MongoDB, Redis, Elasticsearch, DynamoDB

Visualization & Analytics: Power BI, Tableau, Grafana, Superset

WORK EXPERIENCE

May 2025 - Present

linkedin.com/in/lahari-karrotu | github.com/lahari-karrotu

Full Stack AI Engineer - Arkatech Solutions

- Architected and deployed enterprise AI/data platforms on Azure, supporting 10,000+ users and processing 50TB+ data daily.
- Designed Al-driven personalization and recommendation pipelines, improving customer engagement by 25%.
- Built MLOps workflows with MLflow + Terraform, reducing deployment cycles by 60%.
- Delivered real-time inference systems with 99.9% uptime, generating \$2M+ in cost savings.

Big Data Engineer Intern - Cognizant

Jan 2022 – Aug 2022

- Built enterprise ETL/ELT pipelines with AWS Glue, Redshift, and Spark for 5TB+ data, serving 15+ client projects simultaneously
- Implemented real-time streaming pipelines with Kafka + Lambda, reducing manual data processing effort by 30% and saving \$500K annually
- Optimized Spark jobs and Redshift queries, improving query performance by 45% and reducing infrastructure costs by 25%
- Collaborated with cross-functional teams of 8+ members to deliver data solutions for Fortune 500 clients

Data Analyst Intern - EPAM Systems

Dec 2020 – Mar 2021

- Automated PySpark workflows on AWS EMR with Airflow orchestration, processing 2TB+ data weekly for 10+ business units
- Identified and fixed 500+ data anomalies using advanced statistical methods, improving production data reliability by 95%
- Created interactive Tableau dashboards and Power BI reports, enabling data-driven decisions for C-level executives
- Reduced manual reporting time by 80% through automation, saving 40+ hours weekly across the analytics team

DRO IFCTS

PROJECTS

Predictive Maintenance (Manufacturing / Data Engineering) (Professional)

- Technologies: Spark, Snowflake, Azure Data Lake, LSTM, XGBoost, AWS Lambda, React, DockerArchitected enterprise-grade predictive maintenance system processing100GB+ daily sensor data.
- Built Spark ETL pipelines with Snowflake & Azure Data Lake, trained LSTM/XGBoost models on NASA datasets achieving 95% accuracy.
- Deployed real-time inference with AWS Lambda + React frontend, reducing equipment downtime by 30% and saving \$1.2M annually

SmartBuy Al Agent (E-Commerce / Full Stack) (Professional)

- Technologies: React, TypeScript, Gemini, Vercel, CI/CD, PostgreSQL, Redis.
- Built a scalable e-commerce platform with 50,000+ products and a Gemini-powered voice assistant.
- Implemented a microservices architecture with React + TypeScript, integrated an advanced recommendation engine, and real-time cart management.
- Established CI/CD pipelines on Vercel, increased user engagement by 25% and conversion rates by 18% with personalized AI features.

Blinds & Boundaries (Computer Vision / Azure) (Professional)

- Technologies: FastAPI, Azure Storage, App Service, Key Vault, CDN, OpenCV, TensorFlow.
- Developed a production-ready virtual blinds try-on application with 99.5% accuracy.
- Built a FastAPI backend with Azure infrastructure, and implemented real-time computer vision using OpenCV and TensorFlow.
- Deployed via Azure Storage, App Service, Key Vault, and CDN, boosting customer conversions by 35% and reducing. return rates by 20%

Twitter Sentiment Analytics (Social Media / NLP) (Professional)

- Technologies: Spark Streaming, Kafka, Python, NLP, BERT, Elasticsearch, Grafana.
- Built a real-time sentiment analysis platform processing 1M+ tweets daily using Spark Streaming + Kafka.
- Implemented BERT-based NLP models with 92% accuracy; created interactive dashboards with Elasticsearch and Grafana.
- Provided actionable insights for 20+ brands, improving social media strategies by 40%.

CERTIFICATIONS

AWS Certified Solutions Architect – Associate (2025)

Cisco Certified Network Associate (CCNA)

Oracle Database SQL Certified Associate (2023)