

Thrinath Reddy Yarramadha

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SUMMARY

Artificial Intelligence and Machine Learning enthusiast with over 4 years of experience applying data science, predictive modeling, and AI-driven analytics in enterprise environments. Adept in building intelligent systems that enhance decision-making, improve user engagement, and automate business workflows. Proven success in leveraging machine learning techniques and cloud-based platforms (AWS, Azure, GCP) to deliver scalable AI solutions. Strong expertise in Python, SQL, Power BI, NLP, and model deployment pipelines using tools like Airflow and dbt.

EDUCATION

Master of Science, Data Analytics

Clark University (GPA 3.74)

Worcester, MA

May 2025

Bachelor of Technology, Mechanical Engineering

Sreenidhi Institute of Science and Technology, India (GPA 3.71)

Hyderabad, India

May 2021

TECHNICAL SKILL

Technologies & Programming: Python (Pandas, NumPy, Scikit-learn, TensorFlow, Keras, OpenCV, NLTK, spaCy), R, SQL, PL/SQL, C#, JavaScript, HTML5, CSS3, TypeScript, FastAPI, ReactJS, Angular.

Databases & Cloud: Google BigQuery, PostgreSQL, SQL Server, Oracle, MySQL, AWS (S3, Redshift, SageMaker, QuickSight), Azure (ADF, ML Studio), GCP (Vertex AI).

AI/ML & Data Analytics: Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Model Deployment, Predictive Modeling, Feature Engineering, Explainable AI.

Data Analytics & BI Tools: Power BI, Tableau, Google Data Studio, Excel (Advanced), Apache Airflow, dbt, Jupyter Notebooks.

Data Engineering & ETL: ETL Development, Data Modeling, Data Wrangling, Data Cleaning, Apache Airflow, dbt, ADF, IICS.

Tools & Platforms: Git, GitHub, Docker, DevOps, TFS, Jira, VS Code, IntelliJ, WordPress, Blue Prism (RPA).

Methodologies: Agile, SCRUM, CRISP-DM, SDLC, Predictive Analysis, AI Workflows, MLOps.

TECHNICAL WORK EXPERIENCE

Infosys Ltd – Hyderabad, India

Specialist Programmer (Verishop)

Nov 2020 – July 2023

- Partnered with the client's U.S.-based analytics team to build a data-driven churn prediction system aimed at improving customer retention and repeat purchases.
- Analyzed over 1 million customer records to generate behavior-based KPIs such as recency, frequency, monetary value (RFM), and discount dependence using SQL and Python.
- Built and deployed Logistic Regression and Random Forest models using Scikit-learn, identifying high-risk customers with 85% prediction accuracy.
- Developed interactive Power BI dashboards highlighting churn by age group, region, and category, enabling targeted retention campaigns by the marketing team.
- Automated daily ETL and scoring workflows using Apache Airflow and modularized transformations via dbt; data was maintained in Google BigQuery.
- Recommendations from the model contributed to a 9% increase in Q2 customer retention, improving ROI on personalized email campaigns.

Infosys

Systems Engineer

May 2020 - Nov 2020

- Contributed to the development and optimization of Azure Data Factory pipelines and Databricks notebooks to enhance data processing.
- Collaborated closely with senior engineers to design and implement secure payment workflows, ensuring robust data integrity and strict regulatory compliance.

- Wrote and optimized complex SQL queries (DDL & DML) to support efficient data transformation processes, successfully reducing query execution time by 25%.
- Assisted in the seamless migration of Azure Data Factory pipelines across multiple environments supported continuous integration and continuous deployment (CI/CD) processes using Azure DevOps.

Internshala

Campus Data & Engagement Coordinator

Jun 2019 - May 2020

- Conducted data-driven outreach across campus to promote internships, analyzing student engagement metrics to identify high-performing outreach strategies and optimize campaign impact.
- Designed and maintained Excel dashboards to track weekly student participation in internship applications, increasing engagement rates by 25% over three months.
- Partnered with cross-functional Internshala teams to gather student feedback, enabling the launch of targeted internship recommendations by domain (Web Dev, Data Analytics, Marketing).
- Managed end-to-end promotional events using project management tools like Trello and Google Sheets, and automated feedback collection forms via Google Apps Script.
- Built a basic internal Python script to auto-respond to frequently asked questions using email templates and keyword detection (mini chatbot-like logic for Gmail).

PORTFOLIO MANAGEMENT PROJECTS

CLARK UNIVERSITY

Customer Churn Prediction Using Machine Learning

Fall 2023

- Cleaned and preprocessed telecom customer data to extract behavioral features like call frequency and recent activity.
- Built logistic regression and decision tree models to predict customer churn with 78% accuracy.
- Presented model results with feature importance plots to help business understand key churn drivers.

Sales Dashboard & Forecasting with Power BI

Spring 2023

- Developed an interactive sales performance dashboard using Power BI with drill-down and filter options.
- Applied time-series forecasting (ARIMA) to predict monthly sales trends.
- Automated data refresh pipeline connecting SQL Server database to Power BI for real-time updates.

Sentiment Analysis of Product Reviews Using Python

Fall 2024

- Collected Amazon product reviews and preprocessed text data using NLTK and spaCy.
- Built sentiment classification model using SVM achieving 90% accuracy.
- Visualized sentiment trends and common keywords using word clouds and bar charts.

AI-Based Data Pipeline Automation with Airflow

Spring 2025

- Designed an end-to-end data ingestion and ML model scoring pipeline using Apache Airflow DAGs.
- Integrated AWS S3 for scalable data storage and PostgreSQL for managing model output.
- Configured automated alerts for pipeline status monitoring and periodic model evaluation.

SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY

Optimizing Traffic Signal Timings Using Machine Learning

Fall 2019

- Analyzed traffic flow data to identify peak congestion times at key intersections.
- Built ML models to recommend dynamic traffic signal timing adjustments for better traffic movement.
- Validated improvements through simulation, reducing average wait times and easing congestion.

Invoice Processing Automation using Blue Prism

Spring 2020

- Automated invoice lifecycle with Blue Prism, including email and ERP integration.
- Built reusable components with exception handling and Work Queues.
- Implemented dynamic queue management for high-volume invoice processing.