# **OBJECTIVE**

Expert in advanced machine learning techniques and data engineering, specializing in the development of scalable data architectures and the application of analytical models to improve decision-making and operational efficiency in technology-driven environments.

#### WORK EXPERIENCE

Dream Studio Atlanta, GA

Data Engineer

- Engineered advanced Python-based machine learning pipelines, leveraging algorithms like XGBoost and Random Forest to enhance predictive analytics capabilities, achieving a 10% increase in accuracy for environmental impact assessments.
- Streamlined and automated large-scale data workflows using Python with libraries such as Pandas and PyYAML, boosting data handling efficiency and scalability by 18% for ecological studies and regional job growth projections.

Research Foundation for SUNY Buffalo, NY

Research Aide Jul 2023 – May 2024

• Analyzed over 20,000 animal health records using Python and created detailed Tableau visualizations to study immune responses and effectively monitor viral pathogenesis impacts.

Metal Scope India Pvt. Ltd

Puducherry, India

Sep 2024 – Current

Data Engineer

*May* 2021 – *Jan* 2022

- Designed and implemented a MySQL database from scratch, enhancing data retrieval processes, eliminating redundancy, and significantly improving workflow efficiency.
- Integrated this MySQL database with Azure Database for MySQL Flexible Servers, setting up a robust backend in Python to automate the entry of customer data into the frontend system.
- Utilized Azure Computer Vision for automated extraction of input data from customer design sheets, converting data to JSON format for seamless integration with backend Python code that facilitated structural design calculations.
- Developed custom models for receipt recognition across different vendors, significantly automating and optimizing the data input workflow.

#### Larsen & Toubro (L&T) Pvt. Ltd.

Bangalore, India

Data Engineer

Jan 2021 – April 2021

• Developed and deployed interactive Power BI dashboards to dynamically visualize project workflows and key performance metrics, directly resulting in a 10% increase in operational productivity and efficiency.

## PROJECT EXPERIENCE

#### **British Airways Data Science Job Simulation**

• Executed a comprehensive data extraction and sentiment analysis project, web-scraping the entire Skytrax section for British Airways customer ratings using Python and BeautifulSoup, and applied topic modeling techniques to improve booking prediction accuracy by 15%.

#### **BCG X GenAI Job Simulation**

Spearheaded the development of an AI-powered financial chatbot for BCG's GenAI Consulting team, integrating
complex financial data extracted from 10-K and 10-Q reports using Python and rule-based logic to deliver userfriendly financial insights.

## **Returns Processing Agent**

Designed and implemented a vision-based pipeline for automatic returns processing using image recognition technologies
to verify product authenticity, purchase history, and compliance with return policies based on images uploaded to the
system.

# **IMDb Top 50 Movies Analysis**

Developed a Python script using BeautifulSoup to scrape IMDb for the top 50 movies, applying advanced data cleaning
and analysis techniques to provide detailed insights into movie trends and support data-driven decision-making for media
projects.

## **EDUCATION**

# State University of New York

Buffalo, NY

MS in Data Science and Applications (GPA: 3.59/4.0)

Jan 2023 - June 2024

Relevant Coursework: Machine Learning, Programming in Python and R, DBMS, Data Structures & Algorithms, Data Visualization, Tableau, Microsoft Azure Cloud Services, Cybersecurity, Generative AI, Large Language models.

## **SKILLS & INTERESTS**

- **Programming Languages:** Python, R, SQL, PostgreSQL, MySQL
- Database Management & Data Visualization: Microsoft Power Platform, Tableau, Power BI, Excel
- Machine Learning & AI: TensorFlow, Scikit-Learn, Azure AI Services
- Cloud Platforms: Microsoft Azure
- Statistical Analysis: Regression Analysis, Time Series Analysis, Probability Theory
- **Project Management:** Agile, Scrum, API Development

## **CERTIFICATIONS**

- Microsoft Certified: Azure Fundamentals (AZ-900), 07/2024
- Microsoft Certified: Azure AI Fundamentals (AI-900), 06/2024