Sagun Shrestha
Machine Learning Engineer

fssagunshrestha@gmail.com
https://www.linkedin.com/in/sagun-shrestha-tech/
https://github.com/slavdefense
https://www.sagunshrestha.tech/
(818)-930-0018
Los Angeles, US

Creative Machine Engineer with technical expertise in Python, javascript, flask, SQL, NOSQL, Spark, Airflow, AWS, RESTapi, GraphQL. Proven ability to design scalable ETL/ELT pipelines, build machine learning predictive models, real-time streaming systems, and storytelling tools (Tableau, Power BI). Track record of optimizing data workflows and analytics with project management skills at NBCUniversal, Elevate Advisory, and APCT Inc. Proficient in Linux environments and modern cloud-based architectures. Quick learner and excellent communication skills.

Work Experience

Machine Learning Engineer
NBCUniversal | Los Angeles

Mar 2025

- Built GraphQL APIs and AI-powered chatbot integrations (Copilot 360, Jira, Teams) to improve data accessibility and collaboration.
- Optimized AWS Glue/Spark ETL pipelines (3B+ records/day), cutting runtime by 30% and costs by ~$72k Annually
- Engineered secure, data-driven scalable pipelines (AWS Glue, S3, Athena, Airflow, Spark) to enhance enterprise analytics.
- Delivered consistent operational support to maintain data integrity and availability across various platforms
- Provided mentorship to a data analyst by teaching Python programming from the ground up and guiding him through the ELT scripts behind our pipelines so he could build accurate, automated Power BI dashboards.
- Leveraged machine learning models to optimize advertising campaigns and improve targeting accuracy
- Applied sophisticated algorithms to analyze large datasets, extracting valuable insights for machine learning applications
- Designed and deployed machine learning models for personalized recommender systems with the ability to work independently.
- Leveraged ad tech platforms to develop and deploy machine learning models for targeted advertising campaigns
- Applied advanced mathematics principles to develop and optimize machine learning models

Data Engineer
Elevate Advisory | Utah

Nov 2023 - Mar 2025

- Designed and implemented cross-platform desktop and web interfaces for client management and employees with secure, real-time access to key financial metrics and business development.
- Engineered automated ETL pipelines (Python, Airflow, AWS Glue, MongoDB) integrating multi-source financial data, improving processing efficiency and reliability.
- Developed and deployed data cleansing scripts, boosting data accuracy by 20% and optimizing SQL and NoSQL queries to reduce report generation time by 30%.
- Applied data engineering expertise to extract and organize information from relational and document-based databases for use in legal proceedings and litigation with strategic thinking.
- Applied leadership skills to mentor junior engineers and foster a collaborative environment for data engineering projects
- Enhanced client relations by providing expert data engineering services and timely project updates.
- Applied data manipulation techniques to clean and transform raw data for machine learning applications
- Leveraged expertise in intellectual property to guide the development of novel machine learning algorithms and models
- Leveraged Research Data to develop and optimize machine learning models for enhanced predictive accuracy

- Applied machine learning techniques to optimize marketing campaigns and improve customer engagement

Full Stack Python Developer
Advanced PCB | Los Angeles

Nov 2021 - Nov 2023

- Built new Python automation scripts in Linux, improving efficiency by 25% in business value.
- Designed ETL pipelines (Airflow, PySpark) integrated with SQL Server, reducing reporting time by 30% improving company sales.
- Developed React/PyQt GUIs and FastAPI REST APIs for real-time manufacturing data visualization. Utilized version control software to track changes and manage code versions for data transformation scripts and ETL processes
- Collaborated effectively to work cross-functionally, ensuring seamless data integration and analysis Applied entrepreneurial thinking to identify and implement innovative data solutions, enhancing efficiency and scalability
- Applied pandas to preprocess and transform large datasets for machine learning model training

Projects

Diabetes Risk Prediction Model

Jan 2025 - Mar 2025

- Built and deployed an end-to-end ML pipeline (Flask, Python, AWS S3, Airflow, Docker), predicting patient readmission risks. Deployed with render.
- Leveraged scikit-learn for machine learning model development and deployment in data engineering
- Developed data pipelines adhering to strict consumer protection standards

IoT Streaming

Dec 2024 - Jan 2025

- Real Time Streaming with Kafka, Apache Spark, AWS(S3, Glue, RedShift) containerized in Docker.
- Managed data staging, monitor big data and resolve issues

Slot Machine

Present

Game application, JavaScript control flow with sequence, branching and looping. Html, Sass, Animate CSS, JavaScript , Posgresql, Exploratory statistics data analytics with R for winners data

Core Skills

Airflow, Spark, AWS Glue, Databricks, Kafka, Athena, Data mining, project management, Python, SQL, Javascript, R, S3, Glue, Athena, Redshift, PostgresSQL, mySQL, MongoDB, Firebase, Cassandra, Docker, Git, Docker Compose, Kubernetes, Jira, Agile methodologies, command line, excel, Tableau, Power BI, Plotly Dash, Flask, Django, React, Node Js, HTML5, Express Js, CSS, Bootstrap, Vercel, render, Heroku, Surge, Github

Education

California State University Northridge

Bachelors of Science Manufacturing Systems Engineering

General Assembly

Associate Full Stack Software Development and computer science

Eastern University

Oct 2023 - Mar 2025

Masters Data Science - Machine Learning and Business Analytics