# Sajal Kuikel

Danchhi, Kathmandu, Nepal

# Summary

Passionate software engineering graduate with a strong foundation in Python, Databases, SQL, Data Analytics, and Machine Learning, with a 6-month long AI Fellowship Experience at Fusemachines. Experienced as a Data Analyst and IT Project Manager in the healthcare domain, leading multiple projects and providing data-driven insights to hospital management. Proven experience in developing software solutions from scratch, working with databases, and building ML models and data pipelines. Seeking a challenging role in Machine Learning/ Data Engineering, with a strong commitment to bringing problem-solving and data skills. Highly motivated, fast learner, and adaptable in a dynamic environments.

# Education

Fusemachines Inc. Apr 2024 - Present

MicroDegree in Aritificial Intelligence — (Fellowship)

University of Northampton, NAMI College

B.Sc. (Honors) Software Engineering

Grade: First Class with Honors.

Kathmandu, Nepal

2019 - 2022

Kathmandu, Nepal

# Experience

Bharosa Hospital Nov 2022 - Present

Data Analyst / IT Project Manager

New Baneshwor, Kathamandu

- Performed data analysis on pharmacy operations and created a web dashboard for data-driven decisions on stock orders, supplier selection, and optimal reorder times.
- Achieved a 2x profit margin by halving turnover time and significantly reducing losses from expired products through optimized stock management and ordering practices.
- Led multiple vendor projects from end to end, gaining leadership, collaboration, and managerial skills.
- Developed training modules under the supervision of management consultants and led staff training and evaluation sessions to improve operational efficiency and data accuracy. Received managerial skills training from experts.

## **Projects**

### Kalimati Vegetable Market Forecasting

- Developed a time series forecasting model using SARIMAX to forecast the price and market demand volume of top vegetables in Kalimati Market. The goal was to help farmers make informed decisions on choosing the right crops to plant at the right time, maximizing profit and minimizing post-harvest loss.
- Built an interactive web interface using Streamlit to generate forecasts based on weather attributes as exogenous variables.

#### Bharosa Hospital Laboratory Information Management System

• Built from scratch using Laravel and Livewire, following the waterfall software development methodology as part of a university project. Key features include Delta Check functionality to detect erroneous lab reports.

#### AirBnB guest arrival prediction using tree-based methods

 Applied machine learning models such as Bagging Classifier, Random Forest, and XGBoost to predict booking cancellations. Fine-tuned XGBoost parameters, performed feature importance analysis, and visualized decision trees to enhance model interpretability.

#### E-commerce Recommender System

 Researched AI techniques for recommender systems and demonstrated a solution using Amazon's product review dataset to provide recommendations. Applied content-based filtering and collaborative filtering methods.

## Training and Courses

Introduction to Data Engineering (Datacamp)

Data Science with Python (Datacamp)

Introduction to Apache Airflow in Python (DataCamp)

Advanced SQL for Data Science (LinkedIn Learning)

Intermediate Python (Datacamp)

Mathematical Foundations of Machine Learning (Udemy)

#### Skills

Python, Streamlit, SQL, Apache Airflow, Git, PHP, Laravel, REST API, Data Engineering, Machine Learning, Time series Forecasting, Web Scraping, Selenium, Data analytics, Visualization, Databases, Problem-solving, Teamwork, Leadership, Organizational Skills