

ASWIN KUMAR R

Associate Machine Learning Engineer | Junior Data Scientist

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CAREER OBJECTIVE

Associate Machine Learning Engineer and Junior Data Scientist with hands on experience in data analysis, machine learning, deep learning, NLP, and generative AI. Proficient in Python, SQL, ETL pipelines, model development, and deployment using MLOps and cloud-ready frameworks. Seeking entry level opportunities to build scalable, data driven and production grade ML solutions.

TECHNICAL SKILLS

- **Programming & Databases:** Python, SQL (MySQL)
- **Data Analysis & Statistics:** Pandas, NumPy, Exploratory Data Analysis (EDA), Data Cleaning, Feature Engineering, Descriptive & Inferential Statistics, Hypothesis Testing, ANOVA, Correlation Analysis
- **Machine Learning:** Scikit-learn, XGBoost, Regression, Classification, Clustering, Model Evaluation, Hyperparameter Tuning, Cross Validation
- **Deep Learning:** TensorFlow, Keras, CNN, RNN, LSTM, Feedforward Networks, Model Optimization
- **Generative AI & NLP:** LLMs (OpenAI, Mistral), LangChain, Hugging Face Transformers, RAG Pipelines, NLTK, Prompt Engineering
- **Data Engineering & MLOps:** ETL Pipelines, Apache Airflow, Docker, Data Wrangling, Data Warehouse Concepts
- **Visualization & BI Tools:** Power BI (DAX, KPIs, Drilldowns), Tableau, Excel Dashboards
- **Frameworks & Tools:** Flask, Django, FastAPI, Git, GitHub, Jupyter Notebook

PROFESSIONAL EXPERIENCE

KMMC Medical College & Medical Centre - System & Data Operations

Duration: Last 6 Months

- Performed system administration, data updates, and validation across institutional platforms
- Managed NMC related system work, compliance updates, and online documentation submissions
- Maintained and updated the official website ensuring data accuracy and regulatory standards
- Supported internal applications and assisted in student-focused app development

PROJECT PROFILE

Domino's Sales Prediction | Time Series Forecasting & Deep Learning

Python, ARIMA, LSTM, TensorFlow, Pandas

- Analyzed 2+ years of historical sales data using EDA and statistical techniques
- Built ARIMA, regression, and LSTM models achieving **15% improvement in MAPE**
- Generated forecasts improving **sales planning accuracy by 20%**
- Developed an end-to-end ML pipeline for training, evaluation, and prediction

Disease Predictor | LLM-Powered Health Assistant

Mistral LLM, NLP, Hugging Face, Unsloth, Streamlit

- Designed an AI-based health assistant for symptom-driven disease prediction
- Fine-tuned **Mistral LLM** using **Unsloth** for improved inference efficiency
- Applied NLP preprocessing and prompt engineering to enhance prediction accuracy
- Deployed interactive application using Streamlit for real-time inference

Sales and Budget Analysis, Power BI

Power BI, Excel, KPIs, DAX

- Created interactive dashboards with drilldowns, heatmaps, and KPI metrics.
- Performed variance analysis to identify gaps between budget vs. actual performance.
- Automated reporting to support decision-making and financial insights.

EDUCATION

Vins Christian College of Engineering, Anna University

B.E. - Computer Science Engineering | **CGPA:** 8/10

Hindu Vidyalaya Matriculation School

Higher Secondary Certificate (HSC), Computer Science | **Scored:** 70%

COURSES & CERTIFICATIONS

- Data Science Course - Besant Technologies (BDreamz) (Mar 2025)
- PwC - Data Analytics Virtual Intern | Call Centre Trends & Customer Retention (Oct 2024)
- TCS - Data Visualization Virtual Intern | Empowering Business with Effective Insights (Nov 2024)
- Accenture - Data Analytics and Visualization Virtual Intern (Dec 2024)
- Complete Data Science Course (2024–2025)

LANGUAGES

- English
- Tamil
- Malayalam