

# Ayush Prasad

Bengaluru, Karnataka | +91 9110024512 | ayush.usn024@gmail.com | <https://ayushmanas.github.io/cv/>

## Profile

Data Scientist with 4+ years of experience in predictive modeling, marketing analytics, and applied machine learning. Expertise in building end-to-end data solutions that drive measurable business impact. Adept at translating business problems into analytical models and delivering insights using Python, SQL, and cloud platforms like GCP.

## Professional Experience

04/2022 – PRESENT BANGALORE, INDIA

### Senior Data Analyst

Dentsu Global Services (Merkle Inspire Pvt Ltd)

- Developed end-to-end AI solutions using BERT, Transformers, and Gemini for NLP tasks, integrating RAG and vector memory to enhance classification, topic modeling, and question answering through advanced prompting techniques.
- Currently exploring agentic AI to build multiple agent-agent systems.
- Developed advanced ML models (e.g., XGBoost, clustering, deep learning) for customer segmentation, churn, and LTV, increasing business ROI by over 15%.
- Performed uplift modeling and targeting optimizations using A/B testing frameworks.
- Built scalable pipelines on GCP and Databricks for scalable model training, evaluation and deployment using platforms like Vertex AI with kubeflow, databricks workflows
- Applied deep analytics to OTT platforms and campaign strategies to generate actionable recommendations.
- Provided data driven consultation to various e-commerce, digital media B2C clients to help streamline their operations.
- Collaborated with cross functional teams to streamline data collection, analysis and decision making processes.
- Enhanced targeted marketing efforts while ensuring data privacy standards were upheld, successfully eliminating reliance on third-party cookie data for audience targeting, which strengthened our compliance efforts.

12/2020 – 03/2022

### Data Analyst

Merkle Inspire Pvt Ltd (formerly Ugam Solutions Pvt Ltd)

- Developed closed loop reports using Excel and SQL, which significantly improved decision-making efficiency for both the team and clients, leading to more informed strategies.
- Generated multiple audience segments tailored for advertisers on a large-scale OTT platform, utilizing an in-house scalable clustering solution that enhanced targeted marketing efforts.
- Created a minimum viable product (MVP) by leveraging a production-grade ML model for large-scale datasets, which not only enhanced client OTT platforms but also contributed

## Professional Experience

to a 15% revenue growth in F21Q2.

- Achieved an additional 27% revenue growth through ad-hoc analytics for a key client, demonstrating the tangible value of targeted data insights in driving business success.
- Received recognition for excellence in AI/ML implementation, which played a crucial role in enhancing stakeholder engagement strategies and effectively showcasing the impact of our solutions.

## Key Projects

11/2024 – PRESENT

### Search & Rescue : Deliveries at risk prediction

- Developed ETL and scoring pipelines using Python, GoogleSQL for operational risk and conversational components, which ranked orders based on a cumulative risk score from two models, leading to a 12% reduction in delivery risks and saving approximately \$50K in costs.
- Created a binary classification model using XGBoost for operational risk based on operational features, which enhanced risk assessment accuracy.
- Processed large datasets utilizing SQL and Python, implementing an end-to-end automated pipeline that ensured seamless integration of data processes.
- Utilized the Gemini 2 flash LLM model for topic classification, leveraging predefined sentiment markers from customer chats, call logs, and agent notes, which improved our understanding of customer interactions.
- Managed data sources through BigQuery and Google Cloud Storage (GCS), deploying the model on GCS and orchestrating the workflow using Kubeflow Vertex AI pipelines for efficient operation.

03/2024 – 10/2024

### Address IQ - Deployable ML Grading Tool

- Lead the team for enhancing PoC ML solution as a unified machine learning model of assessing the data quality of dell customer addresses by analysing the contextual information present within each address.
- This solution has a self starting process and creates features dynamically on the go and trains using active learning approach and flags uncertain record ms for manual intervention.
- Built and deployed a Gradient Boosting Model using PyCaret on Python, leveraging MLflow for model registry, it follows a modular design architecture.
- Utilised PostgreSQL to source annotated address data fields for model training and testing.
- Streamlined data processing and deployment, ensuring scalability and maintainability.

## Key Projects

📅 11/2023 – 02/2024

### AI-Driven Micro-Segmentation

- Developed targeted micro audiences for retail brands by analysing consumer watch behaviour, demographic information, and content metadata, which improved the relevance of marketing strategies, which led to 10% lift in ad stream revenue.
- Implemented a micro-segmentation proof of concept utilizing PySpark and Python on the Databricks platform, which streamlined data processing and enhanced analytical capabilities.
- Leveraged generative AI to craft hyper-personalized marketing strategies, focusing on specific consumer moments, which led to increased engagement and conversion rates.
- Enhanced consumer engagement by delivering actionable insights through smaller micro segments based on demographics and video engagement activity, helping to tailor targeted advertising efforts.
- Created user archetypes by profiling these micro segments, which were then used in multiple campaigns, ensuring that marketing efforts resonated with specific audience needs.
- Integrated data from Snowflake SQL and AWS S3, which facilitated comprehensive analysis and improved data accessibility for campaign strategies.

📅 04/2022 – 12/2022

### Demographics Imputation

- Collaborated with cross-functional teams to develop end-to-end ETL scripts for processing large volumes of customer viewership data, creating a comprehensive analytical dataset that enhanced our understanding of consumer behavior.
- Refined the data processing methodology by integrating platform and website data, which helped establish scoring and modeling criteria from the ground up using a three-way match waterfall logic, leading to more accurate insights.
- Built distributed machine learning models using PySpark's Spark ML framework for demographic prediction, which significantly improved the accuracy of our demographic insights, enabling us to make better-informed decisions.
- Applied advanced predictive techniques, including tree-based classifiers like RandomForest and XGBoost, as well as deep learning models such as Multilayer Perceptron, which resulted in more precise predictions and better-targeted marketing strategies.
- Utilized data sources such as Snowflake SQL and AWS S3, which streamlined our data handling processes and improved overall efficiency, making it easier for the team to access and analyze data.

## Technical Skills

### LANGUAGES/TOOLS

Python  
SQL  
PySpark  
Git  
XGBoost  
GBM  
ANN  
Excel

## Technical Skills

### PLATFORMS

Google Cloud (BigQuery, Vertex AI)  
Databricks  
Tableau  
AWS  
Snowflake

### ML TECHNIQUES

Regression  
Classification  
Clustering  
LTV Modeling  
Uplift Modeling  
Recommendation Systems  
ETL  
MLOPS

### OTHER

A/B Testing  
Time Series Analysis  
Feature Engineering  
Model Interpretability

## Certifications

### Machine Learning Engineering for Production DeepLearning.ai

<https://coursera.org/share/e579ca94f329412d95afa4b974b71176>

### Advanced SQL Kaggle/Coursera

<https://www.kaggle.com/learn/certification/ayushmanas/advanced-sql>

### Tableau for Data Science Coursera

[https://www.coursera.org/account/accomplishments/verify/F538NLCCHZJY?  
utm\\_source=mobile&utm\\_medium=certificate&utm\\_content=ce  
rt\\_image&utm\\_campaign=sharing\\_cta&utm\\_product=course](https://www.coursera.org/account/accomplishments/verify/F538NLCCHZJY?utm_source=mobile&utm_medium=certificate&utm_content=cert_image&utm_campaign=sharing_cta&utm_product=course)

## Achievements

- Certificate of Merit — Decoding Gen AI (2025)
- Cypher Minsky Awards — Excellence in AI Strategy (2023)
- Individual Brilliance Award — Ugam Solutions (2022)

## Education

📅 08/2016 – 09/2020 📍 BANGALORE, INDIA

### ISE - Information Science Engineering | BE - Bachelors of Engineering PESIT BSC