



PROFILE SUMMARY

- **Analytical & Detail-Oriented Data Scientist** with **2+ years** of experience, **combining strong software engineering foundation with applied ML & data analytics.**
- Notable success in architecting & delivering **end-to-end ML solutions** from exploratory analysis to scalable deployment across **regression, classification, clustering & emerging AI paradigms** including **computer vision & RAG-based systems.**
- Proven track record of driving measurable business impact including **accelerated insurance claims processing by 30%** through AI-led automation while strategically **identifying the top 15% high-value customer cohorts** to enhance revenue focus & targeting precision.
- Innate excellence in **designing & optimizing data pipelines & intelligent workflows,** while driving seamless data integration, accelerating delivery timelines & significantly elevating overall operational efficiency.
- Technically proficient in **Python, SQL, TensorFlow & PyTorch,** with a demonstrated capability to translate complex datasets into high-value, actionable insights that strengthen decision-making and business performance.
- A fast learner with **strong problem-solving skills** & a passion for **leveraging AI to solve real-world challenges.**

MACHINE LEARNING PROJECTS EXECUTED

Enterprise MLOps & Batch Inference Platform | AeroPrice B2B Suite

- Architected a production-grade MLOps ecosystem leveraging DagsHub & MLflow to institutionalize experiment tracking & model versioning—drastically improving deployment reliability & accelerating rollback/recovery cycles by over 60%.
- Built a scalable B2B batch processing framework enabling automotive dealerships to execute vectorized predictions on 10K+ inventory records in a single run through FastAPI, eliminating iterative processing inefficiencies & significantly boosting throughput.
- Transformed system responsiveness by integrating Upstash Redis caching, reducing API latency by ~75% (from ~600ms to sub-150ms) and delivering a consistently high-performance user experience.
- Engineered a fully automated CI/CD pipeline using GitHub Actions for seamless model deployment to Hugging Face—eliminating manual intervention and ensuring faster, error-free release cycles.

AI-Driven Claims Intelligence Platform | InsureTech 360 Dashboard (CNN, ANN, RAG)
Reimagining Claims Processing Through Automation & Intelligence

- Transformed legacy, manual claims validation into an AI-powered decisioning platform by integrating Computer Vision for damage assessment with RAG-based policy intelligence.
- Engineered a unified architecture combining CNN/ANN models & GenAI-driven document querying, enabling real-time validation and contextual insights.
- Accelerated end-to-end claims processing by 30%+ for the customers, while significantly enhancing document retrieval precision and operational turnaround efficiency.

AI-Powered Pricing & Discovery Engine | FairStay Intelligence Suite
Enhancing Revenue Optimization & Search Relevance

- Developed a dynamic pricing engine using XGBoost regression, significantly improving pricing accuracy with an R² score of 85%.
- Leveraged SQL capabilities within the FairStay project to extract, analyze & interpret complex datasets, enabling actionable insights, improving data accuracy & supporting informed business decision-making.
- Built a high-performance semantic search layer using FAISS, enabling sub-millisecond, context-aware property discovery without recurring API dependencies.
- Elevated user experience and platform efficiency by combining predictive pricing with intelligent, cost-optimized search capabilities.

CORE COMPETENCIES

- Data Science
- Machine Learning Model Development & Evaluation
- Generative AI & RAG-based Systems
- Exploratory Data Analysis (EDA) & Data Insights
- Feature Engineering & Data Preprocessing
- Predictive Modeling (Regression, Classification)
- Clustering & Segmentation (K-Means)
- Deep Learning (ANN, CNN)
- Data Pipeline & Workflow Automation
- Statistical Analysis & Hypothesis Testing
- Model Optimization & Performance Tuning
- Search Relevance & Recommendation Systems
- Data-Driven Product Enhancements
- Cross-Functional Collaboration || Global Stakeholder Engagement
- Documentation & Experiment Tracking

TECHNICAL SKILLS

- **Programming & Querying:** Python (Pandas, NumPy, Scikit-learn), SQL
- **Machine Learning & AI:** Regression Models, Classification Models, Clustering (K-Means), XGBoost, Feature Engineering, Model Evaluation
- **MLOps & Infrastructure:** Docker, CI/CD Pipelines (GitHub Actions), MLflow (DagsHub), Redis (Upstash), Hugging Face
- **Deep Learning:** TensorFlow, PyTorch, ANN, CNN
- **Generative AI & Search:** RAG (Retrieval-Augmented Generation), FAISS (Vector Search), Semantic Search
- **Data Visualization:** Matplotlib, Seaborn, PowerBI
- **Web & Deployment:** FastAPI, Streamlit, Responsive UI, CMS Development
- **Tools & Platforms:** Jupyter Notebook, Google Colab, VS Code
- **Version Control & MLOps Basics:** Git, GitHub, Virtual Environments, Model Packaging
- **Automation:** Data Pipeline Automation, Workflow Automation, Script-Based Processing

Customer Intelligence & Segmentation Engine | Olist E-Commerce Optimization
Driving Precision Marketing at Scale

- Redesigned campaign strategy by building data-driven customer segmentation models across 100K+ transactions, eliminating ineffective “one-size-fits-all” approaches.
- Engineered RFM-based feature pipelines using SQL transformations and applied K-Means clustering (k=4), validated through Elbow Method and Silhouette Analysis.
- Delivered highly targeted campaign strategies, identified top 15% high-value customer cohorts and achieving strong clustering performance (Silhouette Score: 0.37).

WORK EXPERIENCE

KrishaWeb, Ahmedabad || Web Developer

Jun’23 to May’25

- Scalable CMS Engineering & Experience Optimization:** Engineered responsive, accessible CMS interfaces by translating complex business requirements into scalable, high-performance components, strengthening usability and long-term maintainability.
- AI-Driven Personalization & Search Enhancement:** Advanced intelligent user experiences by integrating AI-assisted capabilities, leveraging store analytics & behavioral patterns to enable personalized recommendations & improved search relevance.
- Quality Engineering & Performance Stability:** Ensured platform robustness through rigorous testing, debugging, and iterative refinements, delivering consistent UI behavior and high system reliability under varying workloads.
- Cross-Functional Delivery & Data Integration Excellence:** Partnered with product and engineering teams to deliver data-intensive CMS capabilities, enabling seamless data flow and accurate analytics integration for informed decision-making.
- Technical Documentation & Continuous Improvement Enablement:** Institutionalized structured documentation of workflows, configurations, and enhancements, driving knowledge continuity, cross-team alignment, and scalable development practices.
- Performance Monitoring & Data-Driven Optimization:** Supported continuous optimization by tracking application metrics and performance trends, enabling informed enhancements and sustained system efficiency.

INTERNSHIP

KrishaWeb, Ahmedabad || Trainee (Web Development)

Feb’23 to May’23

- Responsive UI Development & Performance Optimization:** Delivered responsive, high-performance web interfaces using core technologies, optimizing assets & load efficiency to enhance user experience & front-end scalability.
- Engineering Discipline & Code Quality Excellence:** Strengthened development rigor by adhering to structured coding standards, version control best practices & advanced debugging approaches, ensuring clean, maintainable, and reliable codebases.
- Collaborative Development & Continuous Improvement:** Accelerated delivery quality by partnering with senior engineers on requirement understanding, code reviews & iterative enhancements, embedding a strong feedback-driven development culture.
- Analytics Integration & Data-Driven Enhancements:** Enabled informed optimization by supporting integration of analytics & performance tracking mechanisms, driving data-backed improvements in application behavior & usability.

SOFT SKILLS

Strategic Planner	Leader
Adaptability	Innovator
Communicator	Collaborator

CERTIFICATIONS

-  **Data Science with Generative AI** || Physics Wallah & PWC
-  **LinkedIn Learning Artificial Intelligence Foundations Machine Learning Certification**
-  **BCG X GenAI Certification**
-  **IBM Data Visualization Using Python Certification**
-  **Data Analytics Essentials** || Cisco
-  **Claude Code in Action** || Anthropic

EDUCATION

Bachelor of Engineering (Information Technology) || Gujarat Technological University, Ahmedabad
2023

PERSONAL DETAILS

Portfolio: <https://kunalbaghel.vercel.app> (ML & Data Projects)
Date of Birth: August 2001
Languages Known: English, Hindi, Gujarati
Address: Ahmedabad, Gujarat