

# Atharva Deshmukh

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## Summary

Data Scientist with experience in AI integration and machine learning, skilled at translating complex analyses into actionable business insights for executives and stakeholders. Proven record of improving fraud detection accuracy to 95% and optimizing wildfire response times by 25% through data-driven solutions.

## Experience

### CrowdDoing NGO

*Solutions Architect AI Integration*

**Sep 2025 - Present**

*San Francisco, CA*

- Applied deep learning and geospatial AI techniques (CNNs for image classification, anomaly detection on sensor data, ensemble predictive models) to identify high risk fire zones, expected to reduce false positive alerts by 30% and optimize resource allocation.
- Collaborated with stakeholders to build real-time dashboards and decision support systems that connect predictive models to stakeholders, expected to accelerate response times by up to 25% during catastrophic fire events.
- Led the development of decision support dashboards that connected predictive models, anomaly detection agents, and natural language query interfaces with stakeholders, achieving a 25% faster response time and improving crisis communication in wildfire events

### Dark Horse Digital Solutions

*Data Scientist*

**Aug 2022 - Jul 2023**

*Mumbai, IN*

- Spearheaded the design and deployment of XGBoost ensemble models for financial fraud detection, improving accuracy to 95% and reducing false positives by 35%.
- Directed a cross departmental MLOps initiative using MLflow, Kubernetes, Docker, and Azure DevOps CI/CD, integrating PostgreSQL Database for 99.9% uptime and seamless model retraining.
- Implemented A/B testing pipelines with Python and Spark, applying hypothesis testing and SHAP values to validate deep learning models, and communicated results to leadership to drive data-driven adoption of model improvements.

### Dark Horse Digital Solutions

*Data Scientist*

**Jun 2021 - Jul 2022**

*Mumbai, IN*

- Built machine learning models with advanced feature engineering to design a COVID-19 risk matrix, overcoming limited data challenges and improving early risk detection accuracy by 20%.
- Performed hypothesis testing, A/B testing, and model validation to ensure reliability of predictive models, strengthening decision making for healthcare risk assessments.
- Automated insurance claim workflows by developing ETL pipelines in Apache Airflow and Spark with real time model scoring and deployment, reducing manual reviews by 45% and freeing 20+ adjusters for complex cases.
- Deployed gradient boosting and NLP driven models to improve underwriting accuracy, reducing claim denial related revenue loss by 18% and enabling better business decisions.

### VESIT Renaissance

*Data Analytics Intern*

**May 2020 - Jul 2020**

*Mumbai, IN*

- Created a Python-based analytics dashboard with PostgreSQL backend to track institutional KPIs, improving academic decision-making efficiency by 30% through actionable data visualizations and automated reporting.
- Designed large scale data validation processes in Apache Spark for 10K+ daily records, applying anomaly detection algorithms to improve data quality by 20% and reduce downstream processing errors.

## Education

### Rochester Institute of Technology

*MS Information Technology and Analytics*

**Aug 2023 - May 2025**

*Rochester, NY*

### University of Mumbai Mumbai

*BS in Computer Engineering*

**Jul 2017 - May 2021**

*Mumbai, India*

## Skills

- **Programming & Languages:** Python, R, SQL, Java, JavaScript, Bash, Git, NoSQL, React
- **Frameworks:** Machine Learning, PyTorch, TensorFlow, scikit-learn, Google ADK, LoRA Fine-tuning, RAG, NLP, Scikitlearn, Hugging Face Transformers, LangChain, MCP, Tableau, Prompt Engineering, Open Router
- **Cloud Platforms:** AWS (SageMaker, S3, Lambda), GCP (Vertex AI, BigQuery), Azure (ML Studio, Databricks)
- **Databases and Visualization tools:** MySQL, PostgreSQL, MongoDB, Redis, NoSQL, Tableau, PowerBI, Vector Databases

## Projects

**Vizard AI** | [Link](#)

*Open Source*

**May 2025 - Sep 2025**

*Rochester, NY*

- Engineered an LLM-powered multi-agent pipeline with ReAct and Vertex AI, automating scoring for 1,200+ resumes against 100+ job descriptions, diminishing manual build time by 75% and accelerated candidate selection.

## Certifications

- **Microsoft Certified: Azure Data Scientist Associate:**Credential ID: C2F98ADE9E9ECB9D