

ANIKET DESHPANDE

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PROFESSIONAL SUMMARY

Data Scientist & ML Engineer with 3+ years of experience delivering high-impact analytical solutions across EdTech, renewable energy, and financial services. Proven track record of architecting scalable AWS/Azure pipelines processing 10k+ daily events with 95%+ accuracy. Specialized in the full ML lifecycle including NLP, predictive modeling, and real-time analytics with a focus on translating complex datasets into actionable insights that improve model reliability and reduce operational costs.

EDUCATION

ARIZONA STATE UNIVERSITY

M.S., Data Science, Analytics, and Engineering (Computing & Decision Analytics)

Aug 2024 - May 2026

Tempe, AZ

- **GPA:** 3.8/4.0

- **Coursework:** Machine Learning, Statistical Modeling, Big Data Analytics, Cloud Computing, Deep Learning

MIT WORLD PEACE UNIVERSITY

PG Diploma, Artificial Intelligence & Machine Learning

Jul 2022 - May 2023

Pune, India

- **GPA:** 3.7/4.0

MIT WORLD PEACE UNIVERSITY

Bachelor of Computer Application, Computer Application

Jul 2019 - May 2022

Pune, India

- **GPA:** 3.8/4.0

SKILLS

- **ML & AI Frameworks:** PyTorch, TensorFlow, Scikit-learn, XGBoost, LightGBM, CatBoost, Transformers (HuggingFace), Keras, LSTM, Statistical Modeling, A/B Testing, Hyperparameter Tuning, Model Evaluation & Validation
- **NLP & Large Language Models:** BERT, GPT-2/3/4, Meta LLaMA-2, T5, Text Classification, Sentiment Analysis, Named Entity Recognition (NER), Speech Emotion Recognition, Prompt Engineering, RAG (Retrieval-Augmented Generation)
- **Data Engineering & Cloud:** SQL, PostgreSQL, MySQL, AWS (SageMaker, EMR, Glue, S3, Lambda, Kinesis, EC2), Azure (ML Studio, DevOps, Data Factory), Apache Spark, PySpark, Pandas, NumPy, ETL Pipelines, Data Warehousing
- **MLOps & DevOps:** Docker, Kubernetes, Git, GitHub Actions, CI/CD Pipelines, Model Monitoring, Drift Detection, FastAPI, Flask, RESTful APIs, Microservices Architecture, Blue-Green Deployments
- **Visualization & Analytics:** Tableau, Power BI, Matplotlib, Seaborn, Plotly, Streamlit, Gradio, Jupyter Notebooks, Data Storytelling, Exploratory Data Analysis (EDA)
- **Certifications:** AWS Certified Machine Learning - Specialty, HarvardX: High-Dimensional Data Analysis, IBM Data Science Professional Certificate, Infosys Springboard: Applied NLP

PROFESSIONAL EXPERIENCE

EDPLUS AT ARIZONA STATE UNIVERSITY

Aug 2024 - Present

Scottsdale, AZ

Instructional Design Assistant

- Engineered scalable data pipelines processing 10,000+ daily learner interaction events across 15+ adaptive learning platforms, implementing ETL workflows with Python, reducing data processing latency by 40%.
- Developed and deployed ML-based early-risk detection models using 20+ behavioral and psychometric features, improving student readiness-check accuracy by 30% and enabling proactive intervention for at-risk learners.
- Collected, cleaned, and ensured the quality of learner and course data, implementing rigorous QA checks to meet set standards for model training, A/B testing, and performance evaluation.

SUZLON ENERGY PVT. LTD.

May 2021 - Aug 2021

Pune, India

Data Analyst – Predictive Maintenance & IoT Analytics

- Built production-ready Remaining Useful Life (RUL) prediction models using XGBoost and Random Forest on 500GB+ SCADA time-series data, achieving 95% failure detection accuracy and enabling \$2M+ annual savings through proactive maintenance scheduling
- Automated anomaly detection pipelines using Python and SQL Server by implementing statistical control charts and threshold-based alerts, reducing manual diagnostic effort by 25% and enabling 24/7 real-time turbine health monitoring
- Designed interactive Tableau dashboards visualizing 50+ operational KPIs and risk metrics for 200+ wind turbines, supporting data-driven maintenance decisions and improving stakeholder visibility across engineering and operations teams

PROJECTS

LLM-Powered NLP Web Application – Production GenAI Platform

- Architected a production GenAI platform using FastAPI, Docker, and Gradio with BERT/T5 models, processing 500+ daily requests at <500ms latency while ensuring 100% availability via an intelligent local-to-API fallback system.
- Streamlined deployment by 60% through GitHub Actions CI/CD with a blue-green strategy and automated smoke tests, enabling rapid feature iteration and seamless production transitions.

Fraud Detection with Drift-Aware Evaluation – Adaptive ML System

- Developed a recall-optimized ensemble (XGBoost, RF, LR) on 280k imbalanced transactions, utilizing PCA and class-weighting to achieve 83% recall and 15% better precision than SMOTE-based approaches.
- Engineered an adaptive recalibration mechanism using KS tests and PSI metrics to monitor concept drift, restoring recall by 25% on shifted distributions while keeping manual review workload under 1%.

Stockio: Financial Forecasting & Anomaly Detection – Intelligent Trading Platform

- Built an automated intelligence platform integrating Prophet/ARIMA with VADER sentiment analysis, achieving 93% precision in anomaly detection and delivering real-time insights to 1,000+ concurrent users.
- Architected an explainable ML pipeline using SHAP and cache-aware processing, reducing false positives by 40% while deploying to HuggingFace via Azure DevOps for transparent, risk-aware visualizations.