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   **Aug 2024 - May 2026**
M.S., Data Science, Analytics, and Engineering (Computing & Decision Analytics)   *Tempe, AZ*
- **GPA:** 3.8/4.0
- **Coursework:** Machine Learning, Statistical Modeling, Big Data Analytics, Cloud Computing, Deep Learning

MIT WORLD PEACE UNIVERSITY   **Jul 2022 - May 2023**
PG Diploma, Artificial Intelligence & Machine Learning   *Pune, India*
- **GPA:** 3.7/4.0

MIT WORLD PEACE UNIVERSITY   **Jul 2019 - May 2022**
Bachelor of Computer Application, Computer Application   *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**
Instructional Design Assistant – ML Research & Data Engineering   *Scottsdale, AZ*
- Engineered scalable data pipelines processing 10,000+ daily learner interaction events across 15+ adaptive learning platforms by implementing ETL workflows with Python and AWS S3, enabling real-time personalization research and reducing data processing latency by 40%
- Developed and deployed ML-based early-risk detection models on AWS SageMaker by extracting 20+ behavioral and psychometric features, improving student readiness-check accuracy by 30% and enabling proactive intervention for at-risk learners
- Orchestrated A/B testing framework across 2 cross-functional teams by designing controlled experiments and statistical analysis workflows, resulting in measurable 15% improvement in course completion rates and data-driven curriculum optimization

SUZLON ENERGY PVT. LTD.   **May 2021 - Aug 2021**
Data Analyst – Predictive Maintenance & IoT Analytics   *Pune, India*
- 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, empowering data-driven maintenance decisions and improving stakeholder visibility across engineering and operations teams

PROJECTS

LLM-Powered NLP Web Application – Production GenAI Platform | Link
- 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 | Link
- 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 | Link
- 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.