JAMES RIFFEL

Fayetteville, AR | 479 - 806- 0919 | jamesriffelvi@gmail.com | linkedin.com/in/james-riffel-vi

PROFESSIONAL SUMMARY

Analytics Professional with 2+ years developing machine learning models and production pipelines for procurement optimization and AI systems. Built predictive analytics achieving 88% accuracy in price forecasting while creating automated tools that streamlined supplier operations at Simmons Foods. Proficient in Python, SQL, and cloud platforms with experience deploying models from development through monitoring. Currently completing Computer Science degree (May 2026) with MIT Applied Data Science certification. Skilled in translating complex data into actionable insights for cross-functional business teams.

SKILLS

- **Programming Languages:** Python, SQL, R, Java, C/C++, JavaScript, MATLAB
- **Machine Learning:** Scikit-learn, TensorFlow, PyTorch, Gradient Boosting, Random Forest, Linear Regression
- **Data Engineering:** ETL Pipelines, Feature Engineering, Data Modeling, PostgreSQL, Big Data Processing
- **Cloud & MLOps:** Azure, AWS, Docker, CI/CD Pipelines, Model Deployment, Automated Monitoring
- **Analytics & Visualization:** Tableau, Pandas, NumPy, Seaborn, Statistical Modeling, A/B Testing
- **Development Tools**: Git, Node.js, Angular, TypeScript, SolidWorks, HSMWorks
- **Business Skills:** Cross-functional Collaboration, Stakeholder Communication, Project Management, Data Storytelling

EDUCATION & CERTIFICATIONS

- **Bachelor of Science in Computer Science** | University of Arkansas | *Expected May 2026*
  Bachelor of Science in Biomedical Engineering | University of Arkansas | *May 2024*
  Concentration: Computer Science | Relevant Coursework: AI, Biostatistics, Machine Learning, Software Engineering
- **MIT Applied Data Science:** Leveraging AI for Effective Decision-Making | *March 2025*
  Focus Areas: Python Programming, Machine Learning, Data Visualization, Deep Learning, Recommendation Systems
- **MIT Mastering Big Data Analytics** | *In Progress*
- **MIT Introduction to Artificial Intelligence on Cloud** | *In Progress*

PROFESSIONAL EXPERIENCE

Procurement Analyst| Simmons Foods | *Current*

- Developed machine learning price forecasting models using Python, NumPy, and Pandas, enabling strategic supplier negotiations and cost optimization.
- Built automated ETL pipelines with SQL and Tableau, transforming raw procurement data into real-time KPI dashboards for executive decision-making.
- Created data-driven vendor selection algorithms that streamlined sourcing processes across poultry and pet food categories.
- Collaborated with cross-functional teams to design ERP data workflows, improving regulatory compliance tracking and audit readiness.

AI Model Optimization Intern | Outlier.AI | *Summer 2024*

- Optimized large language model performance using prompt engineering and statistical analysis.
- Built Python and SQL validation scripts that automated model testing and established continuous improvement frameworks.
- Implemented quality assurance protocols for AI-generated content using quantitative evaluation metrics and ground-truth benchmarking.
- Deployed real-time model monitoring infrastructure enabling rapid detection and correction of performance degradation.

PROJECTS

Chicago Housing Price Prediction Model | MIT Applied Data Science Capstone

- Built ML pipeline using Gradient Boosting, Random Forest, and Linear Regression achieving 88% accuracy within $2,700.
- Deployed production model with Pandas and Scikit-learn for real estate valuation and market analysis.

Biomedical Image Processing for Cancer Detection

- Created decision tree and neural network classifiers in MATLAB for medical imaging cancer detection.
- Implemented image processing algorithms and statistical modeling for biomedical pattern recognition applications.

Arkansas Healthcare Database Web Application

- Designed full-stack platform using TypeScript, Angular, Node.js, PostgreSQL on Azure with location-based querying.
- Built scalable database architecture supporting statewide healthcare data access for Arkansas residents.

Thermodynamic Modeling and Statistical Analysis

- Created MATLAB, R, and Python models for thermodynamic analysis and biostatistical healthcare data modeling.
- Applied numerical methods and statistical inferencing for biomedical modeling and data-driven decision making.