# **GLENN DALBEY**

Data Science & Analytics Professional

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## **TECHNICAL SKILLS**

# **Programming**

Python (Expert), R, SQL, TypeScript, JavaScript, C++, C#, Java, HTML/CSS

#### ML & AI

PyTorch, TensorFlow/Keras, scikit-learn, XGBoost, Hugging Face, DistilBERT, OpenAI API

### **Data Science**

Pandas, NumPy, Tableau, Statistical Analysis, Data Mining, Predictive Modeling, Big Data

#### **Cloud & Database**

AWS (Certified), PostgreSQL, MongoDB, S3, Weights & Biases

# Web & Deployment

Flask, FastAPI, Streamlit, React, Next.js, Docker, CI/CD, GitHub Actions

## **Specializations**

Computer Vision, NLP, Multimodal AI, Healthcare AI, Deep Learning, LLM Orchestration

# PROFESSIONAL SUMMARY

Results-driven Data Science professional with MS in Data Science and proven expertise in production AI/ML systems. Successfully deployed healthcare AI with 93.8% accuracy and production-grade performance. Demonstrated success in advanced predictive modeling (90.9% ROC AUC), multi-modal AI, computer vision, NLP, and MLOps. Combines 15+ years of operational excellence and continuous improvement leadership at John Deere with cutting-edge technical expertise in Python, deep learning, and cloud technologies.

# FEATURED DATA SCIENCE PROJECTS

# **Apollo Healthcare Connect**

Production Multi-modal AI Healthcare Triage System | MS Capstone

#### apollohealthcareconnect.com

- Deployed fully functional healthcare AI system with production-grade architecture and sub-second response times
- Achieved 93.8% combined multi-modal accuracy and 98.0% burn classification accuracy
- Implemented 5-model ensemble architecture combining DistilBERT (NLP) and CNNs (Computer Vision)
- Successfully handled extreme class imbalance (29.7:1 ratio) with advanced loss functions

#### **EDUCATION**

# MS, Data Science & Analytics

Western Governors University Graduated August 2025

- Healthcare AI Capstone (Production)
- NSLS & Student Council Member

## **BS**, Data Analytics

Western Governors University

Mar 2023 - Sep 2024

- NFL Prediction Capstone
- NSLS Member

# **AS, IT Programming**

Clinton Community College
Jan 2022 - Dec 2022

- Data Analytics Certificate
- · Phi Theta Kappa

## **CERTIFICATIONS**

#### **Industry**

- CompTIA Data+ (2024-2027)
- AWS Cloud Practitioner (2024-2027)
- CompTIA A+ (2023-2026)

# **Specialized Training**

- Advanced Computer Vision & Deep Learning
- ML DevOps & Model Deployment
- Transformer Models & BERT
- GANs & CNN Architecture

## **HONORS**

- National Society of Leadership and Success
- Phi Theta Kappa Honor Society

#### Glenn Dalbey - Data Science Professional

 Built production pipeline with Flask API, AWS S3 integration, and comprehensive safety protocols

#### TandemAI - LLM Ensemble Orchestration Platform

Local-First AI Model Collaboration System

github.com/XxRemsteelexX/TandemAI

- Built innovative platform enabling multiple LLMs to collaborate through 4 orchestration modes
- Designed universal provider support for 10+ platforms (Ollama, OpenAI, Anthropic, Groq, LM Studio)
- Implemented real-time streaming, conversation history, and privacyfirst local architecture
- Created cross-platform deployment with Tauri and Electron for desktop applications

# **NFL Rookie Wide Receiver Performance Prediction**

Advanced ML Analysis with Feature Optimization | BS Capstone

github.com/XxRemsteelexX/NFL\_Rookie\_WR\_1K\_Analysis

- Developed predictive model achieving 90.9% ROC AUC on future data validation for 1000+ yard seasons
- Reduced overfitting gap from 18.5% to 0.4% through sophisticated feature optimization (46 → 20 features)
- Implemented temporal validation strategy ensuring model generalization to future NFL seasons
- Created production-ready ensemble model for NFL draft analysis with comprehensive data pipeline

# **Business Analytics AI Platform**

AI-Powered Excel Analytics for Enterprise

business-analytics-ai-platform-production.up.railway.app

- Built professional business intelligence platform with enterprise branding
- Implemented natural language querying enabling non-technical users to analyze Excel data
- Developed automated chart generation and executive-ready visualizations
- Integrated AI-powered analytics for instant business intelligence from uploaded data

# PROFESSIONAL EXPERIENCE

# Freelance Data Science Consultant

Thompson Parking & Mobility Consultants

Current

 Provide data science and analytics consulting services for business intelligence initiatives • Eagle Scout (1995)

#### Glenn Dalbey - Data Science Professional

- Develop AI-powered Excel analytics platform enabling natural language data queries
- Design custom analytical solutions and machine learning models for client-specific challenges
- Support data-driven decision making through advanced analytics and predictive modeling

# **Continuous Improvement Leader & Material Specialist**

John Deere, Waterloo Works & Ankeny Works 2005-2020, 2021-Present

- Led CI Department as Representative and Wage CI Trainer, facilitating process improvement frameworks
- Developed comprehensive training curriculum for warehouse personnel, improving onboarding efficiency
- Designed and implemented the Zones Project, modernizing material flow training systems
- Led departmental CI mapping initiatives to improve operational efficiency and reduce cycle times
- Optimized material replenishment processes using bin methodology, reducing operational inefficiencies
- Managed supply chain logistics, vendor relations, and SAP-integrated inventory management
- Supported engineering teams in workflow re-splits and cycle time analysis for production optimization

# **KEY ACCOMPLISHMENTS**

- Deployed fully functional AI healthcare system with 93.8% accuracy and production-grade performance
- Achieved 90.9% ROC AUC on temporal validation for sports analytics with production deployment
- Built and deployed 5+ live production systems across healthcare, business analytics, and research
- Successfully handled extreme class imbalance (29.7:1 ratio) in medical imaging classification
- Reduced ML model overfitting by 97.8% (18.5% to 0.4% gap) through feature optimization
- Published 15+ open-source projects on GitHub with comprehensive documentation
- Developed scalable ML pipelines and REST APIs for real-world applications with safety protocols