

Glenn Dalbey - Resume Research Document

Research compiled for data science/analytics/AI resume development

Executive Summary

Glenn Dalbey is a data science professional with a Masters in Data Science from Western Governors University and strong technical expertise in AI/ML, evidenced by sophisticated GitHub projects including production-deployed healthcare systems and advanced machine learning models. He demonstrates proficiency in both theoretical concepts and practical implementation, with particular strength in multi-modal AI, deep learning, and MLOps.

Education

Masters Degree

- **Masters in Data Science**
- Western Governors University
- Completed: August 2025
- Capstone: Multi-modal AI healthcare triage system (deployed to production)

Bachelor's Degree

- **Bachelor of Science in Data Analytics**
- Institution: Western Governors University (inferred from NFL project description)
- Capstone: NFL Rookie Wide Receiver Performance Prediction Model

Note: Full educational details require LinkedIn access verification

Technical Skills

Programming Languages

- **Python** (Advanced) - Primary language for data science/ML
- **TypeScript/JavaScript** - Full-stack development
- **HTML/CSS** - Web development
- **SQL** - Data querying and management

Machine Learning & AI Frameworks

- **PyTorch** - Deep learning models, medical image classification
- **TensorFlow/Keras** - Ensemble models, neural networks
- **Scikit-learn** - Traditional ML algorithms
- **XGBoost** - Gradient boosting
- **Hugging Face Transformers** - NLP models (DistilBERT)

Deep Learning Specializations

- **Computer Vision** - Medical image classification, ensemble methods
- **Natural Language Processing** - Text classification, symptom analysis
- **Multi-modal AI** - Combining vision and text models
- **Model Ensemble Techniques** - 5-model ensemble architectures

Cloud & Deployment

- **AWS Services** - S3, cloud deployment
- **Flask** - Web application development
- **Production Deployment** - Live system management
- **Gunicorn** - Production server deployment

Data Science Libraries

- **Pandas** - Data manipulation
- **NumPy** - Numerical computing
- **OpenCV** - Image processing
- **Boto3** - AWS integration
- **Plotly** - Data visualization

Development Tools & Platforms

- **Git/GitHub** - Version control (14 repositories)
- **Jupyter Notebooks** - Data analysis and prototyping
- **Conda/Pip** - Environment management
- **Docker** (implied from deployment practices)

Key Projects

1. Apollo Healthcare Connect (Capstone - MS)

Multi-modal AI Healthcare Triage System | Production Deployed

- **Live URL:** <https://apollohealthcareconnect.com>
- **Tech Stack:** PyTorch, TensorFlow, Flask, DistilBERT, AWS S3
- **Key Achievements:**
 - 93.8% combined multi-modal accuracy
 - 98.0% burn classification accuracy
 - Handled extreme class imbalance (29.7:1 ratio)
 - Real-time inference with sub-second response times
- **Technical Innovations:**
 - 5-model ensemble (EfficientNet, ResNet50, DenseNet121)
 - Advanced loss functions (focal loss + label smoothing)
 - Conservative routing for patient safety
 - Automated provider preparation system
- **Business Impact:** Serving real users worldwide for healthcare routing

2. NFL Rookie Wide Receiver Performance Prediction

Advanced Machine Learning with Temporal Validation | BS Capstone

- **Tech Stack:** Python, Scikit-learn, XGBoost, Pandas

- **Key Achievements:**

- 90.9% ROC AUC on future data
- Reduced overfitting gap from 18.5% to 0.4%
- Feature optimization (46 to 20 features)

- **Technical Skills Demonstrated:**

- Advanced model validation techniques
- Temporal validation strategies
- Feature engineering and selection
- Overfitting diagnosis and remediation
- Probability calibration

- **Business Application:** Production-ready model for NFL draft analysis

3. TandemAI - LLM Ensemble Orchestration Platform

Local-First AI Model Collaboration System

- **Tech Stack:** TypeScript, Node.js, Multiple AI APIs
- **Key Features:**
 - 4 orchestration modes (Conversation, Answer, Argumentative, Research)
 - Universal provider support (Ollama, LM Studio, OpenAI, Anthropic, etc.)
 - Privacy-first local model support
 - Real-time monitoring and collaboration
- **Technical Innovations:**
 - Multi-model orchestration algorithms
 - Hybrid local/cloud AI architecture
 - Real-time streaming and monitoring
 - Cross-platform deployment (Tauri, Electron)

4. Amazon Distribution Network Optimization

Operations Research and Mathematical Modeling

- **Tech Stack:** Python, PuLP, Excel integration
- **Focus:** Supply chain optimization using mathematical programming
- **Skills Demonstrated:** Operations research, optimization modeling

5. Machine Learning Pipeline Projects

MLOps and Production ML Systems

- **NYC Airbnb ML Pipeline:** Scalable ML pipeline development
- **Scalable ML Pipeline with FastAPI:** Production API development
- **Skills Demonstrated:** MLOps, API development, scalable architectures

Professional Experience

Current Position

- **Freelance Data Science/Analytics**
- Client: Thompson Parking and Consultants
- Role: Data science and analytics consulting

Previous Experience

- **John Deere** (mentioned in background context)

- Details require LinkedIn verification

Note: Complete professional history requires LinkedIn profile access

Certifications

Pending LinkedIn profile access for complete certification list

Notable Achievements

Academic Excellence

- Successfully completed Masters-level capstone with production deployment
- Advanced coursework in multi-modal AI and deep learning
- Published detailed technical documentation and research

Technical Accomplishments

- **Production System Deployment:** Live healthcare system serving global users
- **Research Publication Quality:** Detailed technical documentation with peer-review level rigor
- **Advanced Problem Solving:** Successfully handled extreme class imbalance (29.7:1 ratio)
- **Cross-Domain Expertise:** Healthcare AI, sports analytics, business optimization

Open Source Contributions

- Multiple public repositories demonstrating best practices
 - Comprehensive documentation and reproducible research
 - Community engagement through GitHub platform
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Areas of Specialization

1. **Healthcare AI:** Multi-modal medical image and text classification
 2. **Sports Analytics:** Predictive modeling for performance analysis
 3. **AI/ML Orchestration:** Multi-model collaboration and ensemble methods
 4. **Production MLOps:** Deployment and scaling of ML systems
 5. **Computer Vision:** Medical imaging and classification systems
 6. **Natural Language Processing:** Symptom analysis and text classification
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Research & Development Focus

- **Multi-modal AI Systems:** Combining vision and language models
- **Extreme Class Imbalance:** Advanced techniques for skewed datasets
- **Model Ensemble Methods:** Sophisticated multi-model architectures
- **Production ML Deployment:** Real-world system implementation
- **Conservative AI Safety:** Medical-grade safety protocols

- **Temporal Model Validation:** Future-focused validation strategies
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Additional Notes

LinkedIn Profile Access

- Profile URL provided but requires authentication
- Unable to extract certifications, detailed work history, and skills endorsements
- Recommend direct LinkedIn profile review for complete professional background

GitHub Portfolio Strength

- 14 repositories with 0 followers (new or private account previously)
- High-quality, well-documented projects
- Production-level code quality and documentation
- Demonstrates both academic rigor and practical implementation skills

Target Role Alignment

Glenn's background strongly aligns with data science/analytics positions, particularly those requiring:

- Advanced ML/AI implementation
 - Production system deployment
 - Multi-modal AI development
 - Healthcare technology applications
 - Research and development capabilities
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Research compiled: December 2024

Sources: GitHub repositories, background context provided

LinkedIn verification pending for complete professional history