GLENN DALBEY | *Data Science & Analytics*

319-233-4445 | dalbeyglenn@gmail.com
LinkedIn | GitHub | Portfolio

TECHNICAL SKILLS

Programming
Python (Expert), SQL, TypeScript, JavaScript, R, C++

Deep Learning
PyTorch, TensorFlow, Spatial-Temporal Transformers, GRU/RNN, 3D CNNs, Geometric Attention

ML & Data Science
scikit-learn, XGBoost, Pandas, NumPy, Ensemble Methods, Feature Engineering

Cloud & Deployment
AWS (Certified), Multi-GPU Training, Mixed Precision, Docker, Flask, FastAPI

Homelab & Systems
Proxmox, pfSense, n8n, RAG Pipelines, 10Gb Networking, Ubuntu Server

Specializations
Trajectory Prediction, 3D Medical Imaging, Computer Vision, NLP, Multi-modal AI

EDUCATION

MS, Data Science & Analytics
Western Governors University
Aug 2024 - Aug 2025
Healthcare AI Capstone (Production)

BS, Data Analytics
Western Governors University
Mar 2023 - Sep 2024
NFL Prediction Capstone

AS, IT / Programming + Data Analytics Cert
Clinton Community College
Jan 2022 - Dec 2022

AA, Art Studies
Hawkeye Community College
Sep 2019 - Dec 2020

CERTIFICATIONS

• CompTIA Data+ (2024-2027)

• AWS Cloud Practitioner (2024-2027)

• CompTIA A+ (2023-2026)

• Udacity: Deep Learning, CV, GANs, CNNs, Transformers, ML DevOps

HONORS

• National Society of Leadership and Success

• Phi Theta Kappa Honor Society

• Eagle Scout

PROFESSIONAL SUMMARY

Data Scientist with an MS in Data Science who builds things that actually work. I enjoy building and training models on my own multi-GPU homelab, deploying new techniques, and discovering unique ways to solve problems. Whether it's analysis, research, or projections, I dig into how something ticks, figure out why, and extract information that drives better outcomes. My multi-node homelab stack lets me run production applications, train models, and run MLflow, all on my own hardware. 20+ projects on GitHub covering deep learning, medical imaging, NLP, computer vision, and analytics.

FEATURED PROJECTS

NFL Big Data Bowl 2026 | Kaggle Bronze Medal

Player Trajectory Prediction | Top 8% of 1,134 teams

- **Bronze Medal** in prestigious Kaggle competition predicting NFL player trajectories
- Conducted 847+ experiments across 15+ architectures (ST Transformers, GRU, CNN, Perceiver IO)
- Best ensemble: 3-model blend achieving 0.540 Public LB with architecture diversity strategy
- Engineered 167 features (kinematics, ball-relative, temporal, geometric with Voronoi tessellation)

RSNA Intracranial Aneurysm Detection | Kaggle Competition

3D Medical Imaging Deep Learning | 105 Models Trained

- Trained 105 models (21 architectures × 5 folds) for CT angiography aneurysm detection
- Best ensemble AUC 0.8624 with discovery that smaller models outperform larger on limited medical data
- Built complete pipeline: DICOM→NIfTI→ROI extraction→Training→Ensemble on 4 GPUs

Apollo Healthcare Connect | apollohealthcareconnect.com

Production Multi-modal AI Healthcare Triage | MS Capstone

- Live production healthcare AI triage achieving **93.8% accuracy** with sub-second response
- 5-model ensemble combining DistilBERT (NLP) and CNNs; handled 29.7:1 class imbalance
- Full production pipeline with Flask API, AWS S3, and safety protocols

Missing Persons Outlier Detection

Geospatial Crime Pattern Analysis | 41,200 NamUs Cases

- 7 statistical methods + 3 ML models detecting trafficking corridors at up to 46.86σ significance
- I-35 corridor acceleration: 170% increase in missing persons, structural break at 2020
- Live Streamlit dashboard with spatial autocorrelation (Moran's I), ARIMA forecasting, and LISA clustering

PROFESSIONAL EXPERIENCE

Freelance Data Science Consultant

Thompson Parking & Mobility Consultants — Current

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

Continuous Improvement Leader & Material Flow Specialist

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

- CI Department Representative leading process improvement and operational efficiency initiatives
- Designed and implemented Zones Project, modernizing material flow training systems
- Led departmental CI mapping initiatives improving operational efficiency and reducing cycle times
- Managed supply chain logistics and SAP-integrated inventory systems