Dwight Luther Temple

Austin, TX | dltemple93@gmail.com | 512-351-2642 | dwght.com

Exceeds expectations; key-talent; high-growth senior MLE looking to lead transformation

- Enterprise machine learning engineer; world-class process and decision automation, fraud screening, and innovation
- Diligent and dependable, with a record of excelling in high-pressure and challenging environments
- Strong skills in Python and SQL; Production use of TensorFlow, PyTorch, and Clojure
- Intimate experience with XGBoost, CatBoost, Transformers, RNNs, and GNNs for large-scale production
- Proven history of self-directed research excellence and tenacity with publications in conferences and journals
- Tools: Python, SQL, S3, Clojure, PagerDuty, Splunk, Hubble, Snowflake, Airflow, Flink, Streamlit, PySpark

Apple Inc. | Austin, TX | Senior Machine Learning Engineer | Support Fraud | 04/2024 – Present

- Appointed to lead technical initiatives AppleCare Support as bar-raising engineer for customer facing solution portals, contact center operations, and activation unlocks; defends Apple at the point of contact to save $10M+ annually.
- Boosted CatBoost AUC from 0.7 to 0.9 through extensive feature engineering, compute scaling, and process improvement; 40% increase in fraud coverage
- Championed event sequence modeling using BERT; enabled novel feature type for use across LOBs; won innovation award for ability to create embeddings that outperformed their traditional counterparts in AUC by 9% in production models.
- Onboarded and mentored investigators, business analysts, and backfilling MLEs to prior warranty fraud role

Apple Inc. | Raleigh, NC | Senior Machine Learning Engineer | Warranty Fraud | 04/2022 – 04/2024

- First of our organization to deploy models as microservices instead of on-prem; proselytized, collaborated across organizations, resulted in scalable and flexible inference methods and freed us from legacy systems.
- Envisioned and coordinated adoption with software, product, and research teams to use AWS and Kubernetes for automated modeling, deployment, and platform agnosticism for our entire organization. This resulted in measurable improvements in multiple LOBs.
- Boosted fraud program rejects by 50% YoY via process improvements, model consolidation, and feature engineering
- Pioneered novel graph-based approaches for feature engineering and identification of global "looping" repairs; hamstrung pervasive AppleCare+ abuse fraud rings and saved Apple $5M annually in the USA.
- Mentored intern, focusing on label-decomposition and innovative ensembles for fraud source attribution.
- Team awarded first-ever Core Values recognition; awarded first-ever "honorary SWE" for cross LOB collaboration

Apple Inc. | Austin, TX | Machine Learning Engineer | Warranty Fraud | 05/2020 – 04/2022

- Developed fraud analytics model, preventing $35M+ in annual fraud losses using Python, XGBoost, and Snowflake
- Reduced development lifecycle from 2 weeks to <1 day via standardization, and infrastructure scaling using Jenkins and Docker; method set standard for our organization and others followed.
- Devised multi-modal computer vision techniques for fraud-capture; integrated image-segmentation for recycling efforts.
- Won three internal Kaggle competitions for novel features and models; resulted in new production fraud program

ExoAnalytic Solutions | Huntsville, AL | Artificial Intelligence Engineer | 08/2018 – 05/2020

- Developed space situational awareness detection suite using deep-learning, multi-target-tracking, processing 500k+ daily observations using YOLOv3 fused with a feature-aided track correlation Kalman Filter
- Delivered hybrid physics informed RNN with Attention for tracking hypersonic weapon systems using TensorFlow to Missile Defense Agency. The customer commented on the ease of integration compared to others' algorithms
- Engineered probabilistic RNN operating on real-time multi-sensor, multi-target, multi-variate, asynchronous radar data. Orchestrated Python and TensorFlow to MATLAB port using Java interface for government testbed delivery.
- Applied multi-hypothesis tracking in cluttered environments for satellite simulations using EO/IR focal plane observations.
- Led proposal team and developed new business channels focusing on signal anomaly detection with WaveNets for geosynchronous satellites and 3D target tracking using DNNs fused with multiple hypothesis tracking algorithms.

ExoAnalytic Solutions | Huntsville, AL | System Engineer | 05/2016 – 08/2018

- Developed architecture studies for space based EO/IR satellite constellation design for target tracking.
- Estimated three-dimensional point clouds using multiple phenomenology (RF and EO/IR) sensor fusion.
- Served as local office Facility Security Officer; kept, observed, and enforced classified information security standards.

MSc. in Management Science and Business Analytics | 2018 | University of Alabama Huntsville | 3.9 / 4.0
Machine learning, advanced statistics, data mining

BSc. in Aerospace Engineering Astronautics| 2016 | Mississippi State University | 4.0 / 4.0
Honors graduate, marching and concert band, resident adviser (RA of the year), Sigma Gamma Tau, Beta Gamma Sigma

Publications

Temple, D. Real-Time Plume Detection and Segmentation Using Neural Networks. J Astronaut Sci 67, 1793–1810 (2020). https://doi.org/10.1007/s40295-020-00237-w

Temple, D. "Synthetic Heterogeneous Anomaly and Maneuver – Neural Network Event Winnowing." Annual Advanced Maui Optical and Space Surveillance Technologies, 2018

Temple, D. Poole, M. "Network Enabled – Unresolved Residual Analysis/Learning." Annual Advanced Maui Optical and Space Surveillance Technologies, 2017

Goals & Hobbies

- Tenaciously pursue the means necessary to positively impact an operational system, product, or service and chase excellence
- Running, lifting, biking, astrophotography, investing, guitar, and scuba