Cordell Stonecipher

Data Scientist/Machine Learning Engineer
Rochester Hills, MI — stonecipher@oakland.edu

Summary

Data-focused scientist with hands-on experience in machine learning, NLP, computer vision, and statistical modeling. Skilled at building end-to-end pipelines, diagnosing complex technical issues with data, and translating results into actionable improvements. Strong background in Python, deep learning frameworks, and applied analytics; seeking a role where rigorous modeling and practical problem-solving drive measurable impact.

Technical Skills

Languages: Python, SQL, Java, C++, PHP
ML / Data Libraries: PyTorch, TensorFlow, scikit-learn, Pandas, NumPy
Techniques: Transformers, CRF, CNNs, YOLOv8, LSTM/GRU, ARIMA, model compression (pruning, distillation, quantization)
Tools & Platforms: Git, Jupyter, FastAPI, Django, Flask, REST APIs, Windows, Linux, macOS

Projects & Research

Adverse Drug Event Detection (NLP)
Built cross-domain ADE detection pipeline using DistilBERT, BioBERT, PubMedBERT, and CRF. Harmonized token-level labels across datasets, implemented preprocessing and token alignment, and evaluated sequence tagging performance to compare transformer-based and classical sequence models.

CNN Model Compression on CIFAR-10
Implemented pruning, knowledge distillation, and quantization on a convolutional neural network to study accuracy–efficiency trade-offs. Benchmarked models on latency and performance, with a focus on deployment to resource-constrained settings.

YOLOv8 Military Asset Detection
Developed a computer vision workflow for 12-class military asset detection, including data cleaning, augmentation, and training using YOLOv8. Evaluated model performance and discussed considerations for real-time inference.

Time-Series Forecasting & Analytics
Built ARIMA, ETS, LSTM, and GRU models for forecasting tasks. Performed systematic hyperparameter tuning, residual diagnostics, and comparative analysis between classical and deep learning approaches.

Automotive Data Analytics
Applied clustering and MANOVA to a multivariate automotive dataset to understand segments and factor effects. Used correlation analysis and regression diagnostics (including Durbin–Watson) to assess model assumptions and interpret relationships between features.

Professional Experience

Leader Dogs for the Blind – Mechanical & Electrical Technician 2024 – Present

- Use BAS (Building Automation Software) to monitor HVAC and electrical systems, analyzing sensor data and trends to detect anomalies and performance issues.
- Perform data-driven troubleshooting to improve energy efficiency, reduce downtime, and inform predictive maintenance planning.
- Collaborate with operations teams to interpret system behavior and recommend technically sound, data-

backed optimizations.

Rochester University – Operations Manager 2021 – 2024

- Designed and deployed a REST API–based key management system to streamline access control across campus.
- Used systems data and logs to support reliability improvements and long-term maintenance planning.
- Managed budgeting, contractor coordination, and multi-department facility operations, including electrical, HVAC, and structural work.

DRY Medic Restoration – Warehouse Supervisor 2018 – 2021

- Redesigned warehouse layout and workflows, contributing to an increase in annual storage revenue.
- Implemented structured inventory and materials processes informed by utilization patterns.
- Trained and supervised technicians, improving safety, consistency, and throughput.

United States Marine Corps – Rifleman 2017 – 2018

- Developed discipline, resilience, and reliable execution in high-pressure environments.
- Strengthened teamwork, communication, and structured problem-solving skills.

Education

Oakland University 2026
B.S. in Artificial Intelligence

Meta Backend Developer Professional Certificate 2023