

Matthew Leichter

Senior Data Scientist
AI/ML Engineer

Bio/Skills

Matthew Leichter

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Portfolio: <https://matthewleichter.github.io>

Bio

Award-winning Data Scientist with 8+ years of experience in machine learning, statistical modeling, and end-to-end AI product deployment. Winner of HIMSS 2023 AI Model Competition. Specialized in Gen AI, agentic AI architecture, and forecasting using advanced AI/ML toolsets across cloud-native stacks. Scientific publication list available upon request.

Technical Skills

Programming: Python, R, SQL | ML/AI: XGBoost, Random Forest, Bayesian Forecasting, RNN, LSTM, Transformers, Neural Hawkes

Big Data: Spark, Hadoop, Azure Databricks, AWS Sagemaker, Redshift | Visualization: Tableau, Power BI, Seaborn, Matplotlib

MLOps: Docker, CI/CD, GitHub, Confluence, REST APIs, Streamlit
Healthcare: ICD-10, CPT, DRG, CMS, NCQA, URAC, HEDIS, ERISA

Experience

Senior Data Scientist – Theoris Consulting (Eli Lilly)

Oct 2024 – Present

- Built Healthcare Co-Pilot chatbot with blockchain-secure EHR data transfer (AWS SageMaker, Docker, Redshift)
- Forecasted medical trends with Bayesian MCMC, ARIMA, multiple imputation & bootstrapping
- Deployed predictive models with lambda endpoints and CI/CD pipelines for Redshift dashboards

Senior Data Scientist – Vega Consulting (FEPOC / CareFirst)

Jan 2024 – Aug 2024

- Designed fraud detection system using HMM + Probabilistic Graph Models with 94% accuracy (Medicare, Commercial)
- Built LLM-powered chatbot using LlamaIndex, BERT, AWS Bedrock & Comprehend Medical

- Developed ARIMA-RNN models for Medicare call center life cycle & fraud prediction

Senior Data Scientist – UC Davis Medical Center

Jun 2022 – Sep 2023

- Created dynamic pipelines in Azure for Epic-based population risk modeling & admissions forecasting (ARIMA, LSTM, VAR)
- Boosted emergency department model AUC from 76% to 89% using GANs + multi-imputed datasets
- Led CI/CD pipelines and Epic Cloud integration with Docker, Git, Python, Flask APIs

Lead Data Scientist – Quantphi Inc./UC Davis Coordination

Jun 2022 – Apr 2023

- Built traffic forecast models for hospitals & retail (LSTM, ARIMA, DTW); optimized memory usage for Epic APIs
- Designed transformer-based crypto trading bot for institutional client

Lead Data Scientist – Chec Labs | Verana Health | SlingTV

2019 – 2022

- Built chatbot (Word2Vec, Bert), fraud detection (SMOTE), and NLP recommender engines (SlingTV)
- Created churn models, bandwidth estimators, and web scrapers; deployed across AWS & GoLang

Education

University of Middle Tennessee/ Doctorate Degree - Data Science and Computational Statistics

ADMITTED FOR JANUARY 2026 PROGRAM - CURRENTLY ENROLLED

University of Kentucky / Master's Degree - Statistics

AUGUST 2005 - MAY 2008, LEXINGTON, KY

University of Kentucky / Bachelor's Degree - Mathematical Finance

AUGUST 2001 - AUGUST 2005, LEXINGTON, KY

Awards/Certifications

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- AWS Certified Machine Learning Specialist
 - Microsoft Azure Data Scientist Associate
 - Google Deep Learning Specialization (Andrew Ng, Coursera)