

Iris Seaman

Mission, Texas

Applied AI & Machine Learning Engineer

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Applied AI engineer with production experience in Python, LLM applications, and computer vision. Combines hands-on delivery with doctoral research in graph learning and uncertainty estimation.

TECHNICAL SKILLS

Languages & backend: Python, SQL, FastAPI, SQLAlchemy, PostgreSQL, REST APIs.

AI & ML: LLM APIs, document retrieval, PyTorch, scikit-learn, computer vision, OCR.

Cloud & delivery: Google Cloud, Pub/Sub, Airflow, Docker, Terraform, CI/CD, monitoring.

PROFESSIONAL EXPERIENCE

Senior Data Scientist

May 2023 to Sep 2026

Gray Falcon LLC | Remote

- Built and deployed the complete **Python backend for a customer-facing AI assistant** that retrieved documents and product information while maintaining conversation context.
- Took **LLM-based product classification from prototype to production**, owning Python implementation, database integration, and Airflow orchestration, with automated retries, monitoring, and explicit handling of inconclusive predictions.
- Built and scaled image-infringement pipelines across **hundreds of thousands of e-commerce images**, using SIFT features, perceptual hashing, OCR, and image-comparison methods.
- Built event-driven marketplace services with Pub/Sub and PostgreSQL, plus monitoring dashboards and alerts that made workflow status and operational failures visible.

Developer

Mar 2022 to 2023

Gray Falcon LLC | Remote

- Developed foundational tooling for account provisioning, secure internal browser access, and real-time operational monitoring.

Associate Software Engineer

2014 to 2016

Imagine Learning | Provo, UT

- Implemented an early ML model for evaluating free-response student text and built REST APIs for educator-facing analytics and reporting.

SELECTED RESEARCH

- Developed graph-based tumor forecasting that reduced functional tumor-volume MAE from **12.88 to 4.63 mL** versus the original graph baseline in five-fold **internal cross-validation on 758 patients**, with patient-level holdouts.
- Coauthored [research on probabilistic reasoning about autonomous agents](#), featured as a spotlight at the ICML 2019 Workshop on Generative Modeling and Model-Based Reasoning for Robotics and AI.

EDUCATION

The University of Texas Rio Grande Valley

Expected May 2027

PhD in Computer Science with Interdisciplinary Applications, dissertation-only stage.

Northeastern University

2018 to 2020

Doctoral studies, Computer Science.

Brigham Young University

MS 2018; BS 2014

MS and BS in Computer Science.

Massachusetts Institute of Technology

2017

Visiting Student, MIT Probabilistic Computing Project.