

February 3, 2026

Hiring Manager

Quest Diagnostics

Re: Senior Director of Machine Learning

I am writing to express my strong interest in the Senior Director of Machine Learning position within Quest's Healthcare Analytics Solutions team. With a PhD in Mathematics, 9+ years of hands-on ML experience, and a track record of leading teams to deploy cutting-edge models in healthcare and pharmaceutical settings, I am excited about the ground floor opportunity to unlock insights from Quest's world-class healthcare datasets and improve outcomes for patients, providers, and payers.

I bring the hands-on, 'at the coal face' leadership this role requires. At Redica Systems, I built a production LLM classifier using the OpenAI API that processes unstructured FDA enforcement text, owning the entire lifecycle from initial concept through validation frameworks and operational deployment. This system runs in production across our platform, demonstrating my ability to architect and deploy ML systems that yield high-quality, high-confidence results under real-world constraints. I have also designed and implemented RAG systems using HuggingFace and PyTorch, applying retrieval-augmented generation techniques to query regulatory documents-directly relevant to Quest's need for knowledge-augmented approaches in clinical diagnostics.

My technical leadership experience spans 5+ years building and leading high-performing teams. At Gilead, I led a team of 5 data scientists and analysts supporting healthcare reference data analytics, fostering a culture of innovation and professional growth while defining the ML strategy and roadmap. At Takeda, I led digital and data science teams applying ML to manufacturing challenges, serving as a trusted technical advisor to senior leadership. I mentor through hands-on technical guidance, code reviews, and strategic coaching, and I champion continuous learning to stay at the forefront of rapidly evolving ML techniques.

I have deep experience with healthcare data and pharmaceutical quality standards. At Gilead, I worked extensively with HCP/HCO healthcare reference data, building systems that integrated multiple data sources with robust quality frameworks. My 9 years in pharmaceutical manufacturing (Regeneron, Takeda, Gilead) have given me sophisticated understanding of regulatory requirements, quality standards, and the rigor needed to ensure ML solutions meet compliance demands. While I am eager to expand my knowledge of clinical lab data, EHR, and healthcare ontologies like LOINC and SNOMED, my pharmaceutical domain expertise provides strong foundations for understanding healthcare data challenges.

My PhD focused on optimization and control of agent-based models in biological systems, resulting in 5 peer-reviewed publications in top-tier journals and 1 textbook chapter. This research applied probabilistic graphical models, Bayesian methods, and evolutionary algorithms to complex adaptive systems-techniques directly relevant to learning systems that integrate uncertainty, time, and data structure. I am proficient in Python, PyTorch, TensorFlow, and cloud environments (AWS, Databricks, Snowflake), with strong foundations in MLOps principles including model monitoring and lifecycle management. My problem-solving skills, strategic thinking, and ability to navigate ambiguity position me to translate Quest's business needs into innovative AI/ML solutions that drive the product pipeline forward.

I would welcome the opportunity to discuss how my ML expertise, healthcare domain knowledge, and hands-on technical leadership can contribute to Quest's mission of leveraging advanced analytics to solve the biggest clinical diagnostics challenges in medicine. Thank you for your consideration, and I look forward to speaking with you.

Sincerely,

Matt Oremland, PhD