

Matt Oremland, PhD

Head of Data

mattoremland@gmail.com • (518) 560-1473 • Saratoga Springs, NY 12866
<https://www.linkedin.com/in/matthew-oremland-31a312101>

PROFESSIONAL SUMMARY

Data leader with 12+ years driving analytical rigor, platform modernization, and measurable business impact across high-growth technology and life sciences organizations. Proven track record building and scaling data teams, architecting modern data platforms (Snowflake, Sigma, dbt-adjacent pipelines), and translating ambiguous business problems into clear analytical frameworks. Deep expertise in metrics design, data governance, and hands-on leadership - equally comfortable setting strategic direction and diving into technical implementation to ensure data efforts deliver meaningful outcomes.

PROFESSIONAL EXPERIENCE

Redica Systems

April 2025 – Present

Director, Data Strategy & Analytics

Remote

- Lead analytics strategy for pharma clients (Eli Lilly, Merck) using modern data stack: Snowflake for data warehousing, Python for modeling, and custom visualization libraries for client-facing analytics
- Architected reference data platform consolidating multi-source regulatory intelligence data - designed data models, established governance frameworks, and implemented quality controls ensuring analytical accuracy across the organization
- Built production machine learning classifier (OpenAI API) for FDA 483 severity scoring - owned end-to-end design, prompt engineering, and validation methodology; model runs in production across entire platform
- Developed risk-scoring models from scratch in Python and Snowflake, translating ambiguous compliance requirements into clear analytical frameworks that directly influence client decision-making
- Designed scalable data architecture to harmonize messy client data sources (inferring missing values, custom join logic, reference data standardization) - created reusable patterns now used across all client implementations

Tidal Wave Analytics LLC

January 2025 – Present

Consulting Data Scientist

Saratoga Springs, NY

- Paradigm (building supply software): Built production quote fingerprinting model using Random Forest in Databricks - groups quotes into projects using text and numerical features, runs nightly in production, drove measurable business impact on revenue attribution
- Denari (tax tech startup): Designed and implemented RAG system advising businesses on tax filing requirements - ingested IRS and state tax documents, built retrieval pipeline in Python using HuggingFace and PyTorch
- Tidal Wave Games: Built full-stack daily puzzle game (Escalators) from scratch - React/Node.js/Vite/Tailwind frontend, Python puzzle generation, Supabase backend, Google OAuth authentication - demonstrates hands-on technical range across data and engineering

Gilead Sciences

January 2023 – March 2025

Director, Data & Analytics (Medical Affairs)

Foster City, CA

- Defined and executed enterprise data and analytics strategy as strategic advisor to senior Medical Affairs leadership - established analytical frameworks that directly influenced organizational priorities and resource allocation
- Built centralized data lake as single source of truth for healthcare professional (HCP) and healthcare organization (HCO) reference data - consolidated multiple sources, established data governance policies, and drove adoption across Medical Affairs
- Led team of 5+ analysts and Spotfire developers delivering analytics dashboards tracking HCP/HCO interactions and relationships - set analytical standards, prioritized roadmap, and ensured outputs drove actionable business decisions

- Owned metric definitions and data requirements for Medical Affairs analytics - established company-wide standards ensuring consistency and clarity in decision-making
- Managed vendor relationships and internal teams for data acquisition, cleansing, and standardization - translated business needs into technical requirements and drove execution

Takeda Pharmaceuticals

May 2021 – December 2022

Associate Director, Digital & Data Science

Lexington, MA

- Led digital and data science group plus statistical monitoring team - set technical direction, allocated resources, and ensured analytics efforts aligned with highest-priority business problems
- Built predictive models using machine learning (Random Forest, ensemble methods) for manufacturing and quality decisions - drove measurable impact on process optimization and risk mitigation
- Served as Spotfire system administrator - evaluated tooling, managed platform evolution, and established best practices for dashboard development and analytical usability
- Led semi-annual APQR (Annual Product Quality Review) meetings with cross-functional stakeholders - translated complex analytics into executive-ready insights driving strategic manufacturing decisions

Regeneron Pharmaceuticals

May 2016 – May 2021

Senior Process Data Scientist

Rensselaer, NY

- Built automated data pipelines for biopharmaceutical manufacturing analytics - designed ingestion, transformation, and modeling workflows enabling scalable, repeatable analytical processes
- Developed production predictive models (PLS, PCA, ensemble methods) for feed quantity optimization and product quality forecasting - models directly influenced manufacturing operations and reduced waste
- Established analytical methodologies for automated limit calculations and process monitoring - created frameworks adopted across multiple manufacturing teams
- Presented analytical findings to senior leadership and cross-functional stakeholders - translated technical work into business-relevant insights driving operational decisions

Mathematical Biosciences Institute

2014 – 2016

Postdoctoral Research Fellow

Columbus, OH

- Developed agent-based computational models and optimization algorithms for biological systems - published 5 peer-reviewed papers demonstrating ability to translate ambiguous research questions into rigorous analytical approaches
- Applied multi-objective optimization using genetic algorithms to complex systems - built frameworks for hypothesis-driven analysis and model validation

EDUCATION

Doctor of Philosophy (PhD) in Mathematics

2014

Virginia Polytechnic Institute & State University

Dissertation: Optimization and control methods for agent-based models in biological systems

SKILLS & TECHNOLOGIES

Data Platforms & Engineering: Snowflake • Databricks • Sigma • AWS • Supabase • ETL/ELT Pipelines • Data Modeling • Data Governance

Programming & Analysis: Python (Advanced) • SQL • Pandas • Scikit-Learn • HuggingFace • PyTorch • TensorFlow

Machine Learning & Modeling: Random Forest • Ensemble Models • PLS • PCA • LLM Integration (OpenAI API) • RAG Systems • Predictive Modeling

Analytics & BI: Spotfire • Sigma • Data Visualization • Metrics Design • Dashboard Development • Decision Analytics

Leadership & Strategy: Team Leadership • Data Strategy • Analytics Roadmap • Stakeholder Engagement • Hiring & Mentorship • Cross-Functional Collaboration

PUBLICATIONS

- "Optimization and control of agent-based models in biology: a perspective" — Bulletin of Mathematical Biology, 2017
- "A computational model of invasive aspergillosis in the lung and the role of iron" — BMC Systems Biology, 2016
- "Agent-based models and optimal control in biology: a discrete approach" — Mathematical Concepts and Methods in Modern Biology (Elsevier), 2013 (Textbook chapter)