Lauren Knox

Technical Skills

- Programming & Data: Python, SQL, Pandas, NumPy
- Modeling & Forecasting: Time Series Forecasting, Machine Learning, Econometrics, Monte Carlo Simulation
- Text Mining: NLP Pipelines, TF-IDF, Sentiment Analysis, Document Clustering, Word Embeddings, Transformers
- Data Engineering & Automation: Multi-Source Data Integration, Automated Reporting & Workflow Pipelines
- Applications & Tools: Streamlit, Power BI, Tableau (Certified), Snowflake, Excel (Certified), AWS, WordPress

Projects

- **Droplet: Tokenized Water Rights System (HackUSU - Awarded 3rd Place)**   **March 2025**
  Designed a blockchain-based water rights allocation model by deploying 1M ERC-20 tokens on Ethereum (Sepolia), proposing a market-driven governance framework that addresses regulatory, legal, and sustainability constraints in resource management.
- **Clarity Context (NLP News Intelligence System)**   **December 2025**
  Built an end-to-end NLP pipeline that ingests news from multiple APIs, preprocesses text, and applies TF-IDF, sentiment analysis, and document clustering to quantify sentiment intensity, sensationalism, and thematic structure across news sources.

Work Experience

Data Consultant   **August 2025 - Present**
Analytics Solutions Center • Logan, Utah

- Querying and extracting survey data from Metabase to evaluate dataset structure, completeness, and consistency across multiple data sources for the Data Quality Co-op (DQC).
- Engineering and evaluating data quality features capturing missingness, response patterns, outliers, and internal inconsistencies to construct a quantitative data quality scoring model.
- Validating data quality metrics using statistical diagnostics to assess how variations in data quality affect downstream analysis and research usability.
- Developing a text mining–based question answering system for USU Agriculture Extension offices, preprocessing unstructured text and organizing domain knowledge to support community-facing information access.

Operations and Technology Specialist   **June 2025 - December 2025**
Vibrant IP • Logan, Utah

- Designed and implemented automated reporting and analytics workflows, replacing manual monthly processes with standardized dashboards and executive-ready reports for portfolio and marketing decisions.
- Built the company's first unified lead-intelligence system by consolidating and cleaning 400,000+ contacts across HubSpot, Apollo, and legacy trackers, significantly improving data quality and targeting.
- Developed internal operational dashboards with sortable fields, timestamps, and integrated analytics to track campaign performance, lead flow, and content effectiveness.
- Automated report generation and distribution pipelines, eliminating recurring errors, accelerating turnaround time, and removing 10+ hours of manual work per month.

Data Analytics Intern   **May 2024 - August 2024**
Lamb Weston • Kennewick, Washington

- Analyzed financial and operational datasets (10M+ rows), documenting data models and improving data integrity while identifying key performance patterns.
- Rebuilt and transitioned enterprise reporting from DOMO to Power BI and Excel, modeling data relationships and delivering executive-ready dashboards to support business decision-making.
- Collaborated with cross-functional teams in a remote environment to validate reporting requirements, ensure data consistency, and support ongoing analytics initiatives.

Education

Utah State University, Jon M. Huntsman School of Business

Masters of Data: Fintech and Machine Learning Operations emphases   **May 2026**
Triple Bachelor's of Science: Data Analytics, Economics, and Finance   **May 2025**
Dean's list (Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025)