

Professional Experience

Data Engineer, RTX

Jan 2023 – Present

- Led data engineering initiatives for Supply Chain; designed and operated 60+ Airflow, Snowflake, & Postgres pipelines supporting 300+ weekly business users.
- Served as my team's Data Architect for SAP-related initiatives, helping to define ingestion patterns for ERP data and implementing a medallion architecture to standardize transformations & metrics.
- Partnered cross-functionally to translate ambiguous requirements into enterprise-grade data solutions hosted on my team's analytics platform on AWS; leveraged infrastructure-as-code tools, containerization technologies, and serverless compute to deliver scalable, resilient backend services.
- Developed a simulation framework for financial analyses; integrated external economic data APIs, internal business logic, and statistical sampling methods to forecast part pricing and evaluate contractual terms.
- Developed a centralized contracts metadata database, enabling the company to identify \$100M+ in annual assertion opportunities, with \$15M+ realized during the first year of operation.
- Built an automated ML pipeline for predicting on-time delivery with daily inference and monthly retraining; improved model precision by 11%, resulting in more accurate supplier risk forecasts.

Structural Analysis Engineer, RTX

Jun 2018 – Jan 2023

- Designed and analyzed aerospace structures across a wide range of commercial and military platforms.
- Established structural optimization standards for the company; increasing typical weight margins from 1-5% to 10-20%; recognized as Engineer of the Year semi-finalist.
- Built multiple automation tools supporting analysis, optimization, and collaboration; introduced NLP-based methods for solving problems related to unstructured engineering data.

Projects

Agentic Anomaly Detection System

- Built an end-to-end anomaly detection system for multivariate time-series data by combining forecasting algorithms with language models for interpretability.
- Automated context engineering using LangChain tool bindings and a vector database for RAG; deployed system via a lightweight chatbot interface built in Streamlit for interactive anomaly analyses.

Education

Georgia Institute of Technology – MS in Analytics , GPA: 3.9/4.0	2025
University of California, San Diego – MS in Structural Engineering , GPA: 3.9/4.0	2018
University of California, San Diego – BS in Structural Engineering , GPA: 3.8/4.0	2017

Technical Skills

Programming	Python, Docker, Visual Basic, R, C#	Data & ETL	Airflow, SQL (Both OLAP & OLTP), Spark, Databricks
Cloud	AWS, Terraform	Visualization	Tableau, PowerBI, Python