

# NICHOLAS RUFFIN

## SENIOR CLINICAL DATA ENGINEER

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### PROFESSIONAL SUMMARY

Senior Clinical Data Engineer with 12+ years of technology experience, focused on high-scale data architecture. Proven expertise designing enterprise data platforms processing **4.8B+ daily records** and generating **\$7M+ annual revenue**. Specialized in HIPAA-compliant data tokenization, clinical data pipelines, and cloud-native Snowflake/AWS solutions. Expert in optimizing complex ETL/ELT workflows and implementing robust data governance frameworks.

### TECHNICAL SKILLS

**Core:** SQL, Python, ETL/ELT Pipeline Design

**Cloud & Infra:** AWS (MWAA, S3, Lambda, IAM), Terraform

**Data Platform:** Snowflake (Procs, Streams), Kafka, AWS Glue

**Orchestration:** Apache Airflow, GitHub Actions (CI/CD)

**Governance:** HIPAA Compliance, Datavant Tokenization

**Tools:** Docker, Git, Claude AI-Assisted Dev

### EXPERIENCE

#### Senior Clinical Data Engineer | RedSail Technologies

Feb 2025 - Present

- Architected a data monetization platform driving **\$7M+ ARR** by designing secure PII tokenization workflows (Snowflake + Datavant), enabling pharmaceutical clients to access privacy-compliant clinical datasets.
- Engineered de-identification pipelines processing **4.8 billion records daily** (3M+ transactions/hour), ensuring strict HIPAA compliance for downstream data science initiatives.
- Optimized Snowflake architecture (Materialized Views, Stored Procs) to reduce query latency by **40%**, eliminating critical manual bottlenecks.
- Built a Python/Airflow orchestration framework deployed via GitHub Actions, automating **50+ daily workflows** for seamless S3 extraction and ETL processing.
- Implemented automated Health Checks (Snowflake Tasks + Airflow Metrics) achieving **99.5% pipeline uptime**.

**Lead Data Integration Developer | Nimble Solutions**

Aug 2021 - Jan 2025

- Led development of QUARC AR workflow solution using microservices (.NET, GraphQL), increasing case throughput by **32+ cases per rep.**
- Engineered the integration of **50+ data sources** into a unified enterprise workflow, designing API orchestration patterns for high reliability.
- Reduced deployment time by **60%** through CI/CD optimization (Azure DevOps, GitHub Actions), achieving 90%+ test code coverage.
- Managed 5+ engineers, establishing technical standards for cloud infrastructure and mentoring the team on best practices.

**Senior Full Stack Developer | Core & Main**

Jun 2017 - Aug 2021

- Developed enterprise data applications using C#/.NET and SQL, supporting **200+ concurrent corporate users.**

**EDUCATION****Bachelor of Science, Information Technology**

University of Phoenix