# BRET M HARVESTINE

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**dbt & Snowflake Specialist | Data Modeling Innovator | Accomplished Data Engineer**

## SKILLS

**Technologies**:

dbt, Snowflake, Gitlab, Fivetran, Apache Airflow, AWS, Databricks, Secoda, Jenkins, Sqitch

**Programming Languages:**

SQL, Python, YML, Jinja, Apache Spark, Scala, R, Terraform, JSON

**Modeling:**

Data Vault, Star Schema

## EXPERIENCE

**Delta Defense, LLC**                                                               Remote: Denver, CO

*Senior Data Engineer – DevOps, Data Modeling, & dbt Team Lead*          *June 2023 – Present*

- Re-designed Snowflake data warehouse for greater scalability and agility of development for membership and subscription data by implementing Data Vault data modeling and code automation using incremental strategy.
- Improved CI/CD performance and cut operational costs using dbt defer & state building from production artifacts.
- Managed customized synchronization of siloed git repositories using git hooks and gitlab-ci.yml stage configuration to host separate production data pipelines.
- Developed DRY jinja macros for various use cases including more dynamic pivot capabilities, identifying and masking pii/pci data, generating null safe surrogate keys, and templated incremental model generation.
- Implemented Snowflake stored procedures that scan for pii/pci data and perform role/tag-based masking policies to secure our data assets.
- Championed team migration to a new development platform redefining day-to-day development workflow and data operations integrating virtual data builds into our materialized assets. This reduced redundancy of data & daily compute.

*Analytics Engineer – dbt Team Lead & Snowflake Developer*

- Spearheaded the development and implementation of advanced dbt models within Snowflake, orchestrating intricate ELT pipelines. This initiative ensured the creation of refined, thoroughly tested, and highly reusable datasets, seamlessly prepared for analysis within Tableau.
- Designed the dbt project structure and model materialization strategy in Snowflake, optimizing the efficiency and effectiveness of data pipeline operations. This governed approach substantially contributed to speed of delivery, optimized flow of data and improved pipeline performance.
- Prominent leadership role within the team, providing mentorship to junior engineers for technical development, knowledge transfer, and skill enhancement, fostering a culture of continuous growth and improvement.
- Pioneered project innovation by leveraging dbt packages and Snowflake Snowpark, resulting in the augmentation of value across multiple critical business domains including Zuora subscriptions, ad spend analytics, customer engagement insights, sales metrics, and member experience data streams.

- ○ Instituted and enforced best practices & team standards centered around the principles of Don't Repeat Yourself (DRY) for dbt models and configuration management (yml configs). These standards were pivotal in ensuring data confidence through comprehensive observability measures, robust data quality safeguards, and insightful data profiling methodologies.

**FIS Global**                                                                                             Milwaukee, WI
*Data Engineer – Payment Panel Anonymization, AWS & Snowflake*          *January 2019 – June 2022*
- ○ Engineered and deployed robust, secure, and autonomous pipeline operations for the processing of extensive fraud-related financial data. This involved leveraging a skillset encompassing Python, SQL, Apache Airflow, and AWS technologies, seamlessly integrated with the capabilities of Snowflake.
- ○ Significantly enhanced the efficiency and accuracy of model performance for large-scale entity matching between external 3rd party data sources and our internal merchant data dictionary. This optimization directly contributed to heightened accuracy and streamlined data-driven decisions to the marketing team.
- ○ Played a decisive role in the development and refinement of Apache Airflow Directed Acyclic Graphs (DAGs) and Snowflake stored procedures, instrumental in the real-time monitoring and support of production pipelines. These contributions were vital for ensuring operational excellence and robustness.
- ○ Delivered the computation of daily performance metrics and the generation of comprehensive reports pertaining to client data aggregations. These reports served as a crucial tool for tracking current performance benchmarks and gaining insightful foresight into future performance trends.
- ○ Managed meticulous analysis of the daily extraction process to guarantee adherence to stringent client service level agreements (SLAs). This involved scrutiny of data flows, ultimately culminating in the population of dedicated SLA tables within the Snowflake ecosystem.

*Statistician Data Analyst – Business Intelligence Center*
- ○ Subject matter expert orchestrating the integration of FIS internal data centers and client consumer data sources onto the cutting-edge FIS Intelligence Center Platform (Ethos). This transformative effort streamlined data access and empowered informed decision-making for big data processing.
- ○ Innovatively constructed and fine-tuned machine learning models through Databricks notebooks, with a targeted focus on customer retention analysis. Additionally, employed sophisticated natural language processing techniques to enhance FIS mobile banking applications. These accomplishments culminated in high-impact presentations at the prestigious InFocus Conference in Florida.
- ○ Conducted in-depth exploratory data analysis using Databricks notebooks, harnessing the power of Apache Spark, Scala, and Python. This analytical exploration formed the bedrock for advanced Machine Learning and Data Science initiatives, driving data-driven insights and informed strategic choices.

## EDUCATION

**University of Wisconsin-Madison**                                                                     Madison, WI
*Bachelor of Arts, Statistics, Actuarial Science Emphasis*                                    *December 2018*