

DANIEL HAZAN

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SUMMARY

Visionary and experienced Data Engineer with a proven track record of leading and collaborating with cross-functional teams to deliver high-impact data projects. Possessing 8+ years of experience in data engineering, business intelligence engineering, and business analysis, I have a deep understanding of the full lifecycle of data projects. Adept at driving innovation, improving performance, and exceeding customer expectations, I am now seeking a leadership role where I can leverage my skills to guide a team towards success and drive company-wide growth. With a strong commitment to personal and professional development, I am eager to take on challenging, influential projects that push me to expand my scope and make a lasting impact.

TECHNICAL SKILLS

SQL/Database:	Redshift SQL, PostgreSQL, MySQL, MSSQL, Athena
ETL Tools & Frameworks:	Spark, Glue, EMR, Lambda, Kinesis, Step Functions, SQS, SNS, Airflow, SQL Server Integration Services (SSIS), Data Build Tool (DBT) <u>Amazon Specific:</u> DataNet, Cradle, Maestro (CI/CD)
Scripting:	Python, VBA, Java
Reporting:	QuickSight, Looker, Excel
Machine Learning:	TensorFlow, Scikit Learn
Data Warehousing:	Data Modeling, Data Governance, Data Quality, Data Integration
Other:	Django, Git, PHP, HTML, CSS, JavaScript/jQuery, C#

EXPERIENCE

Amazon | Dec 2020 – Present

Data Engineer | Dec 2021 – Present

Delivered impactful projects that optimized data pipelines, managed AWS accounts and Redshift clusters, and ensured data privacy compliance, resulting in significant reductions in processing time, increased efficiency, improved security, and successful outcomes, leveraging my expertise in SQL, Spark, Glue and Python.

- Redshift Optimization & Cost Savings: Improved **Redshift** cluster storage and performance by changing node types, resulting in a reduced cluster size and \$18k annual savings.
- Duplicate/Unused Table Elimination: Created a Python-based **AWS Lambda** function to remove duplicate and unused tables freeing up 70TB of storage and boosting performance.
- ML Model Productionization: Worked with Data Scientists to deploy **ML models** on **Amazon EMR**, using **AWS Step Functions** and AWS Lambda for job orchestration.
- DE Team Lead & Mentor: Led a Data Engineering team, mentoring a direct report and providing training to the BIE team.
- Redshift Federated User Authentication & WLM Configuration: Created Redshift user accounts using Amazon's federation server for auth as well as configured proper **WLM**, reducing query runtime by 6% and improving security.
- Global Retail Event Pipeline Optimization: Optimized data pipeline for global retail events, reducing processing time by 18%.

- CI/CD Deployment Pipeline Creation: Implemented **CI/CD** pipeline using Maestro for streamlined development, testing, and deployment.
- AWS Budgeting: Led **budgeting** for multiple teams and determined cost-cutting measures, resulting in a 15% cost savings (\$50k).

Business Intelligence Engineer | *Dec 2020 – Dec 2021*

Improve the accuracy, consistency, and quality of data and reports, resulting in automation of manual processes, creation of industry-standard AWS solutions, and improved efficiency, security, and stakeholder satisfaction, playing a critical role in expanding programs and making data management systems more performant and scalable.

- Data Lake Migration to AWS: Migrated team **data lake** to AWS, using S3, **AWS Glue**, and Redshift Spectrum, reducing the time required to onboard new data sources.
- Team-Level Data Pipelines & Reporting: Improved accuracy and automation of reporting with key data mart tables and **QuickSight** visualizations, resulting in 12 reports/dashboards and 100% utilization of QuickSight for reporting.
- Org-Level WBR Dashboard: Automated **Excel**-based WBR with QuickSight dashboard to provide insight into short and long-term trends and regional comparisons, resulting in 80% adoption by partner teams in the org.
- BIE Team Lead & Mentor: Led a team of 8 BIEs, mentoring two direct reports and guiding one to a successful promotion to junior BIE, resulting in a well-rounded and skilled team.

Crowd Cow | *Feb 2018 – Dec 2020*

Data Engineer / Business Intelligence Engineer

Led projects to improve the company's data ecosystem and decision-making processes through creation and maintenance of data models, design and build of data warehouses, and configuration of Looker's LookML for BI engineers and users, resulting in improved efficiency and accuracy, and leading to increased productivity and company growth.

- Flexible Cohort Analysis: Improved cohort analysis by adding attributes to dim and fact tables and configuring a **LookML** explore to allow flexible, on-the-fly analysis, reducing time-to-insight and improving decision-making.
- Optimizing Email Marketing with ML: Used **TensorFlow**, Python, and SQL to develop a model for predicting customer purchase behavior, increasing customer engagement and sales with email marketing.
- Customer Segmentation & Personas: Conducted **customer segmentation** using **k-means** clustering and created personas for each, resulting in increased engagement and retention through targeted marketing.
- Data Warehouse Creation: Designed and implemented a new data warehouse with **star schema** and increased **ETL** frequency, leading to faster data analysis.
- LookML Configuration: Implemented a Looker structure with explores, views, and **PDTs**, reducing time-to-insight for BI Engineers and business users and enabling self-serve analysis.

Lowe's Canada/The Mine | *Apr 2014 – Feb 2018*

Data Engineer | *Mar 2016 – Feb 2018*

Enhanced overall data management and reporting processes by creating new data pipelines, automated Excel dashboards, and designed and implemented a new data warehouse. Ensured

data accuracy and consistency, improved the efficiency and usability of the reporting system, and maintained data privacy compliance. Results included reduced processing time for data pipelines, improved security, stakeholder satisfaction, and work output.

- Star Schema Data Warehouse: Built a star schema **data warehouse** to address issues with inconsistent metrics and definitions in BI reporting, resulting in improved data accuracy and trust.
- Python-Based Automation System: Developed a **Python** system to update Excel dashboards overnight, resulting in improved efficiency and usability of reports.
- Snowflake Schema Data Warehouse: Designed and built a **snowflake schema** data warehouse to improve BI reporting, using **SSIS** and SQL, resulting in improved data accuracy and decision-making capabilities.

Business Intelligence Engineer | *Jan 2015 – Mar 2016*

Created an Excel dashboard to track KPIs, streamlined the reporting process for business development teams, and created a macro-enabled excel template for report standardization. Used SQL, Power Query, VBA, and Excel to extract, transform, and load data, create visualizations, and streamline reporting processes. Results included daily KPI usage by the executive team, significant time savings for business development teams during vendor audits, and reduced time for creating new dashboards and reports for the BI team, leading to improved productivity and efficiency.

- Executive Daily Business Review Dashboard: Developed an Excel dashboard tracking company KPIs and goals using SQL and **Power Query**, viewed daily by the executive team.
- Vendor Audit Dashboard: Created an Excel dashboard for business development to streamline vendor audits, using **SQL**, Power Query, and Excel, resulting in a 30% time savings and improved decision-making.
- Excel Dashboard Template: Developed a macro-enabled Excel template for standardizing reporting processes using **VBA** and Power Query, reducing time to create new dashboards and improving BI team productivity and efficiency.

Business Development Analyst | *Apr 2014 – Jan 2015*

Created a web scraping script to collect brand data from competitor websites, developed a sales data set to enhance performance reporting for the Canadian platform, and built a PHP web application for cross-border program onboarding. These projects led to an increase in brands I managed, more comprehensive and accurate metrics for Canadian vendors, and higher brand onboarding in the cross-border program, resulting in enhanced data analysis and reporting capabilities and a thriving cross-border program.

- Competitor Web Scraping Script: Developed a **Python** web scraping script to collect competitor brand data for prospecting purposes, resulting in an increase in the number of brands managed from 25 to over 50.
- Orders/Order Items Datasets: Created **SQL**-based orders and order items datasets for more comprehensive and accurate reporting.
- Cross Border Onboarding Web App: Developed a **PHP** web app for the Cross-Border program's onboarding, resulting in a significant increase in brand submissions and improved visibility into submission status, leading to over 100 brands on the program.

EDUCATION

University of Washington | *Foster School of Business – 2008 – 2012*

Bachelor of Arts in Business Entrepreneurship

Udemy | *Continued Learning (Online) – 2014 – Present*

SQL, Python, AWS Kinesis, AWS Glue, QuickSight, Spark, Data Lakes, Data Warehousing, Machine Learning (TensorFlow/Scikit Learn), Data Modelling, SSIS, Unity 2D Game Development, SEO

PERSONAL PROJECTS

Simple Clustering Application (SCAN) | Unsupervised Machine Learning

Developed a KMeans clustering web app intended for non-data scientists automatically analyze and cluster uploaded datasets.

- Utilizes standard preprocessing methods to automatically prepare uploaded data set.
- Determines optimal number of clusters using silhouette scoring and a custom version of the elbow method.
- Automatically determines which permuted feature sets produce the most distinct clusters by using a custom method that considers them n-dimensional spheres and sorts by least overlap.

Custom Cipher Challenge | Cryptography

Developed a custom cipher and turned it into a web app to challenge cryptanalysts and cryptography enthusiasts to decipher an encrypted message.

Puffy Fish | Mobile App/Game Development

Developed a mobile game with Unity and C#, featuring a risk-reward concept where the growing and shrinking of the player's sprite offers increased points for a larger size while passing through obstacles.

UFC Prediction Model | Supervised Machine Learning

Developed a supervised machine learning model with Tensorflow to predict UFC bout outcomes based on fighter statistics and historical data scraped from the UFC statistics website.

LINKS

<https://danieljayhazan.com/> - Full portfolio with live demos of personal projects.