

Erika Jacobs

ErikaAshley3@gmail.com • (480) 529-1864 • www.erika-jacobs.com

Summary

Data engineer with over 5 years of experience including data management, ETL pipeline development, distributed data processing, and cloud computing. Passion for learning new data-related technologies and solving data production issues.

Skills

- **Languages:** Python, SQL, Scala, R, HTML, CSS
- **Databases:** SQL Server, MySQL, PostgreSQL, Redshift, Athena, RDS, DynamoDB, MongoDB
- **Platforms:** AWS (S3, EC2, IAM, CLI, EMR, Glue), Linux, Bash, GCP, Oracle, Microsoft Azure
- **Frameworks:** DataBricks, Spark, Kafka, Airflow, Hadoop (HDFS, MapReduce, Hive)
- **Tools:** GitHub, R Studio, Access, Excel, Tableau, Visual Studio (SSIS)
- **Application:** data modeling, schemas, cloud architecture, data mining, statistics, machine learning, agile/scrum

Project Experience

[NASA Data Warehouse](#)

Python (Boto3, Psycopg2, Requests, Pandas), AWS (Redshift, S3)

- Reads unstructured weather data from the NASA space weather API. Cleans and structures data into multiple data frames. Creates security role and opens port to connect to Redshift. Stages data in S3 to load into Redshift.

Work Experience

Nationwide Insurance Company, September 2020-Present

Scottsdale, AZ

Data Engineer

- Design, develop, and maintain scalable ETL pipeline for telematics data quality initiatives using Spark SQL and S3. Extract car signals from thousands of JSON/CSV files to create telematics trip output for stakeholders.
- Conduct exploratory data quality analysis for big data from multiple IoT vendors, and identify data quality issues in existing architecture. Work with internal customers to investigate data quality issues and provide solutions.
- Identified substantial error in production machine learning model's scoring code that went undetected for more than a year. Improved model runtime by 30%, and improved efficiency of code by developing loops and UDFs.
- Automate and support manual scoring process for driven trips as part of Nationwide's Smartride program using Spark SQL.

Nationwide Insurance Company, January 2017-September 2020

Scottsdale, AZ

Business Specialist

- Developed ETL scripts to extract data and remove macros from hundreds of Excel documents. Cleaned data and changed variable data types to match SQL Server table, and built loop to insert dataframe into SQL Server.
- Managed monthly ETL pipelines for data production, and managed prioritization amongst responsibilities.
- Automated consolidation and merging of datasets, and verified accuracy of processed data sources for reporting.
- Conducted ad-hoc quantitative analyses, built exhibits, and summarized multiple metrics from large and complex datasets using SQL queries.

Nationwide Insurance Company, December 2015-January 2017

Scottsdale, AZ

Senior Analyst

- Cleaned and manipulated datasets for analysis and verified accuracy of all data.
- Built SQL tables and views for analysis. Wrote queries to consolidate and combine complex datasets.
- Generated dashboards and visualizations, with output including tables, metrics, charts and graphs.
- Maintained positive working relationships with leadership clients across different departments.

Education

Penn State University

University Park, PA

Masters in Applied Statistics - 3.76 GPA

Arizona State University

Tempe, AZ

Bachelor of Arts in Psychology, Theatre

Activities and Awards

- Mathematics Professor through the Maricopa Community Colleges 2019-2020
- Toastmasters Competent Communicator and Competent Leader Awards