# Data Engineer Software Engineer

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#### **Personal Profile**

Data/Software Engineer with a demonstrated experience on large-scale (Big) data solutions including databases (SQL/No-SQL) and ETL/Data pipelines using cloud services. Solid understanding of fundamental Computer Science concepts. Familiar with requirement gathering and SDLC. Hands-on programming experience in multi-language such as Python, Java, SQL, PowerShell. Excellent problem-solving skills and software engineering habits, including peer code reviews, unit testing, etc.

#### **Core Skills**

- OLTP/OLAP/NoSQL
- $\bullet$  MS Azure/Spark
- Java/C#/Python

- ETL/ELT/Data Modeling
- $\bullet$  DevOps/GIT
- Powershell/R/Scala
- Data Pre-processing
- PowerBI/Tableau
- Agile/Scrum/Spiral

## **Career Summary**

# $\begin{array}{ccc} \textbf{2019-present} & & \textbf{Software developer} \\ & & \textbf{Microsoft} \end{array}$

Role outline

Work as software engineer under Office IP antispam team. Response for maintaining and upgrading the ETL/ELT data pipeline, ADF jobs, and components in ADF and ADLS with Cosmos Scope and Kusto. As well as generate ad-hoc visuals with different tools based on different requirements.

#### **Achievements**

- Migrated Cosmos uploader/downloader with ScopeSDK, TSQL and PowerShell from old JavaScriptlogic. Equipped with alert and pipeline monitor to enhance the durability.
- $\bullet$  Troubleshoot issues, errors in ETL services. Generate probes, monitors, alerts for different components and services with C# ,Scope language and PowerShell.
- Built and maintained a big data platform (ADF/ADLS) in Cosmos Scope script as per industry standards and best practices.
- Optimized data pipeline by rewriting new logic and SQL schema, gained both performance and service durability. Reduced up to 20% storage cost with archiving and re-indexing stale data as well as increase the query performance.
- Performed DB admin activities on the multiple DB Servers. Optimized and tuned slow running queries up to 30% by troubleshooting issues with by using SQLServer Profiler and SQLServer Tuning Adviser. Improved the efficiency of the heavy-lift jobs/queries.
- Engaged closely with cross-functional teams to understand requirements, created and automated the pipeline of reports/dashboards with pull/push triggers.

#### 2018 – 2019 BI developer Conagra Brands Inc.

Role outline

Serve under Cost to serve team. Generated annual reports from sketch. Implemented data modeling, user validation and dynamic filters based on stakeholders' requirements.

#### Achievements

• Designed and implemented the whole ETL (Extract, Transform, Load) data process with various transactions within SSIS packages to implement business rules and logic.

- Generated PowerBI reports, dashboards with Star schema. Implemented complex requirements in PowerBI by using DAX and M language.
- Reduced refresh waiting time by using PowerBI API in PowerShell scripts, deployed, automated the scripts on CtrlM Servers.
- Created customized visuals with R libraries. Embedded the PowerBI visuals within Sales-force homepage with PowerBI-JavaScriptlibraries.
- Accumulated agile Product Management experience a full gamut of creating stories, generated PowerBI reports and dashboards, working through user acceptance testing (UAT).
- Hold scrum meetings as scrum master. Wrote various documents such as data mapping document, work detail descriptions for KT sessions and future development.

#### 2013 – 2015 SQL BI developer KSDHC Inc.

Role outline

As a SQL BI engineer, utilize the MS BI stack (SSIS/SSRS/SSAS) to perform ETL process with big scale of data. Includes data cleansing, data labeling and aggregation, etc. Generate different visuals with Microsoft SSRS.

#### Achievements

- Created logical and physical data models based on the requirements utilizing Erwin and NaviCat.
- Improved the performance of the offical website by optimizing slowly running queries, utilized indexes, partitions and deadlock monitor via SQL Profiler and DTA.
- Normalized database tables to avoid redundancy and DML anomalies.
- Developed complex SQL scripts and procedures for data profiling and auditing purposes. Combined C# logic in SSIS packages.
- Utilized Microsoft SSIS/SSAS/SSRS to handle ETL logic, create ad-hoc reports with both tabular model and cube model.
- Developed various Dashboards and Stories using advanced Tableau features including calculated fields, parameters, table calculations, row-level security, R integration and dashboard actions while dealing with Cloud data in SSRS.

#### **Education**

2015 - 2018	Oregon State University (Master degree in computer science)
2010 - 2014	Liaoning Normal University (Bachelor degree in computer science and technology)

### **Certificates**

Microsoft: Azure Database Administrator Associate (Since 2019)

Microsoft: Data Analyst Associate (Since 2019)