**Swathi RESUME**

Technical professional with an extensive portfolio of projects, knowledge of numerous applications and programming languages and around 6 years of background as an ETL Developer using SSIS & Python. A motivated problem solver with an aptitude for innovation and solutions development will benefit top organization by combining technical and designing skills to drive productivity and savings.

**SUMMARY**

* Good Knowledge on Logical and Physical Data Modeling using Normalization Techniques.
* Experience in creating DDL, DML and transaction queries in SQL for SQL Server, Oracle databases, Teradata.
* Experienced in creating Tables, Views, Stored procedures, Functions, Clustered, Non-clustered indexes as per the business and design requirements using T-SQL and PL/SQL.
* Good at writing complex SQL queries involving multiple tables' joins, common table expressions (CTEs), user defined functions, indexed views, cursors and DDL/DML triggers for data consistency and data manipulation.
* Well experienced in ETL methodology for designing and developing Extraction, Transformation and Load processes in dynamic and high-volume data environments using various tools such as Python, SQL Server Integration Services (SSIS).
* Experienced in Importing/Exporting Data from various data sources like Flat file, Excel file, and SQL server OLEDB destinations using SSIS services.

Experienced in

* Experience at Transforming and validating data using SSIS Transformations like Conditional Split, Lookup, Merge Join and Sort and Derived Column for unstructured and redundant data.
* Involved in writing T-SQL code for implement Stored Procedures and Functions for different tasks.
* Wrote and executed various MYSQL database queries from python using Python-MySQL connector and MySQL dB package.
* Proficient in writing unit testing code using Unit Test/PyTest and integrating the test code with the build process.
* Used Python scripts to parse XML and JSON reports and load the information in database.
* Experience in installing and configuring Reporting services and assigning permissions to different levels of users in SSRS.
* Experience in generating Drill down, Drill through reports using Local and Global Variables, Expressions and Filters in SSRS.
* Knowledge in creating Ad-hoc Reports, Drill-Down, Drill-Through, Cascaded, Matrix, Sub-reports, Pie Chart Reports and Tabular Reports for different business domains depending on the specifications and requests.
* Analyzed SQL queries using Execution plan, Query Analyzer, SQL Profiler and database Engine tuning Advisor.
* Experienced with version control systems like Git, GitHub, Bitbucket to keep the versions and configurations of the code organized.
* Strong conceptual, analytical, and design skills with leadership qualities. Able to work with a team or individually with excellent communication skills, and ability to meet deadlines in a fast-paced work environment.

**EDUCATION**

Master of Science - Computer Science| Chicago State University | 3.41 GPA

**Technical Proficiencies**

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| --- | --- | --- |
| * Python * T-SQL, PL/SQL * UNIX Shell Script * Pandas, Numpy | * IDE * MS SQL Server 2012/2016/2017 * Oracle, Teradata * Shell scripting, Bash scripting | * Power BI * MS Visual Studio * Jupyter/Spyder |

**Professional Experience**

**Centene Corporations Inc. – St. Louis, MO – Feb 2019 – Present**

**Sr. Application Software Engineer (ETL with Python)**

**Project:** Centene is one of the largest Medicaid Managed Care Organization which provides Health Insurance to the families of Military and veterans and many other normal people. I’m a part of ETL team working for the project called “Interactive Voice Response (IVR)” which deals with the callers and the recipient’s information and load into Data warehouse to generate the interactive reports and moving the systems from Aspect to Avaya systems.

* Participated in requirement gathering and worked closely with the architect in designing and modeling.
* Designed, developed Created ETL (Extract, Transform and Load) Packages using Python to load data into Data warehouse (Teradata) from databases such as Oracle SQL Developer, MS SQL Server 2016.
* Use Pandas API to put the data as time series and tabular format for central timestamp data manipulation and retrieval during various loads in the DataMart.
* Used various mathematical operations for calculation purpose using python libraries which loading the Fact tables which involves aggregations using dimensions.
* Built database Model, APIs and Views utilizing Python, to build an interactive web-based solution.
* Conducted exploratory data analysis using Pandas, NumPy in Python for developing various machine learning algorithms.
* Used Python libraries and SQL queries/sub queries to create several datasets which produced statistics, tables, figures, charts and graphs.
* Performed data extraction and manipulation over large relational datasets using SQL, Python, and other analytical tools.
* Loaded data in to the Teradata tables using Teradata Utilities Bteq, Fast Load, Multi Load etc.
* Built several BTEQ to load data from Stage to Base a fter considering several performance techniques in Teradata Sql.
* Good experience of software development in Python and IDEs: pycharm, Jupyter Notebook.
* Designed and developed integration methodologies between client web portals and existing software infrastructure using SOAP API and vendor specific frameworks.
* Migration of the current systems/databases from Aspect to Avaya.
* In-depth knowledge on several latest technologies including Micro services architecture for developing Restful (APIs) Web Services and event driven processing utilizing Services Oriented Architecture (SOA).
* Developed SSRS (SQL Server Reporting Services) Reports and added logos, pie charts, bar graphs for display purposes as per business needs. Designed SSRS reports using parameters, drill down options, filters, sub reports.
* Used Microsoft Visio to create different logos, pie charts etc.
* Migrated the python/SQL code through different environments from Development to Production using Dev Ops tools while maintaining versions in the Bitbucket repository.
* Worked with different source control systems like Bitbucket, which are integrated with IDE to maintain shared environment for code and deployments within the team.

***Environment****: Python, Jupyter, Shell Scripting, SQL Server 2016/2012, T-SQL, Teradata, Oracle SQL Developer, MS Visio, Visual studio, Power BI, Power Shell, Bitbucket, Bash Scripting.*

**Questar Assessment, Inc., Minneapolis – Jan 2017 - Feb 2019**

**ETL Developer (ETL with SSIS & Python)**

**Project:** Questar Assessments Inc. is an educational assessment provider for K-12 students. There are multiple State projects within the organization related to processing of student data, loading DataMart from transactional systems, creating interactive reports for districts and schools and generating data files. I’m a part of several different projects like Tennessee, Utah, and Mississippi, Georgia etc.

* Worked with business users, business analysts, program managers, project managers, system analysts, quality assurance analysts for reviewing business requirements.
* Created technical specification documents based on business requirements and collaborated with BA and other developers to discuss design and architecture.
* Designed, developed Created ETL (Extract, Transform and Load) Packages using Python, SQL Server Integration Services (SSIS) to load data into Data warehouse (Microsoft SQL Server), from Excel workbooks and Flat Files into database.
* Developed packages using Python, Shell scripting, XML to automate some of the menial tasks.
* Used Python to write data into JSON files for testing Student Item level information. Created scripts for data modelling and data import and export.
* Developed SSIS Packages to extract data from source systems such as Transactional system for online assessments and legacy system for paper pencil assessments, transform data based on business rules and load the data into reporting DataMart tables such as dimensions, facts and aggregated fact tables.
* Used various control flow components such as For Each loop containers, Sequence containers, Execute SQL Task, Data Flow Task, File System Task, Expression Task, XML Task in SQL Server Integration Services.
* Building Power shell scripts to execute Bulk copy protocol (BCP) commands to pull bulk data into database (we process around 150 Million records).
* Creating and using extensive transformations within data flow task in SSIS such as Lookups, Merge Joins, Derived Column, Data Conversion, Conditional Split, Union, Union All, Multicast, Script component, Row count.
* Developed T-SQL (transact SQL) queries, stored procedures, user-defined functions, built-in functions.
* Using Advance SQL, Dynamic SQL methods, creating Pivot functions, Un-pivot functions, dynamic table expressions, dynamic executions load through parameters and variables for generating data files.
* Generated State Data files which have around 2000 columns and sized at 6-8 GB through building logical data sets referring to business requirements using T-SQL queries by joining multiple tables and used INNER JOIN, LEFT OUTER JOIN, CROSS APPLY, OUTER APPLY, Case Expressions, While loops.
* Used windowing functions such as ROW\_NUMBER (), RANK (), DENSE\_RANK (), NTILE () to order data, remove duplicates in source data before loading to DataMart for better performance.
* Worked on performance tuning of existing and new queries using SQL Server Execution plan, SQL Sentry Plan Explorer to identify missing indexes, table scans, index scans.
* Redesign and tune stored procedures, triggers, UDF, views, indexes and increase the performance of the slow running queries.
* Optimized queries by adding necessary non-clustered indexes and covering indexes.
* Developed Power Pivot/SSRS (SQL Server Reporting Services) Reports and added logos, pie charts, bar graphs for display purposes as per business needs.
* Designed SSRS reports using parameters, drill down options, filters, sub reports.
* Developed internal dashboards for the team using Power BI tools for tracking daily tasks.

***Environment:*** *Python, HTML, CSS, Jupyter Notebook, Shell Scripting, SQL Server 2016/2012, T-SQL, SSIS, Visual studio, Power BI, Power Shell*

**Primerica, Atlanta, GA - June 2015** – **Dec 2016**

**ETL/SSIS Developer**

**Project:** Primerica is a Main Street company for Main Street North America. Their mission is to help families earn more income and become properly protected, debt free and financially independent. In Primerica I am a part of a project called “Sprint to District”, a section in their mobile application.

* Participated in requirement gathering and worked closely with the architect in designing and modeling.
* Developed entire frontend and backend modules using Python.
* Developed tools using Python, Shell scripting to automate some of the menial tasks.
* Used PyQt for the functionality filtering of columns helping customers to effectively view their transactions and statements. Implemented navigation rules for the application and page.
* Performed testing using Django's Test Module.
* Used Django configuration to manage URLs and application parameters.
* Developed a fully automated continuous integration system using Git, Jenkins, MySQL and custom tools developed in Python and Bash.
* Creation of Python scripts for data access and analysis to aid in process and system monitoring, and reporting.
* Job scheduling, batch-job scheduling, process control, forking and cloning of jobs and checking the status of the jobs using shell scripting.
* Generated Python Django Forms to record data of online users.
* Responsible for search engine optimization to improve the visibility of the website.
* Designed and developed integration methodologies between client web portals and existing software infrastructure using SOAP API's and vendor specific frameworks.
* Developed a mail script that extracts code defects data per component for a daily report to drive reducing defects in the code base.
* Worked on Query Optimization Techniques for complex SQL hints Statements.
* Used Performance Monitor and Explain Plan for performance tuning to enhance the performance of databases.
* Proficient in writing unit testing code using Unit Test/PyTest and integrating the test code with the build process worked on Python Testing frameworks.
* Deployed the project into Jenkins using GIT version control system.
* Used Shell scripting for host concurrent programs and migration scripts for deployment.
* Wrote Unix Shell Scripts, undertook Code Optimization and Performance tuning of the application.

***Environment:*** *Python, T-SQL, MS Visual studio, Shell Scripting, Pytest, GIT.*

**SRK Systems Inc.**  **- Dec 2013 – Dec 2014**

**ETL Developer**

**Project**: Load the Integrated Eligibility System (IES) data into Human Services Data Warehouse, allowing executive office of Health and Human Services to perform data analysis, generate reports, and monitor recipient eligibility.

* Collected business requirements from users and translated them as technical specifications and design documents for development.
* Responsible for creating ETL packages using SQL server integration services.
* Developed logging for ETL load at package level and task level to log number of records processed by each package and each task in a package using SSIS.
* Responsible for Deploying, Scheduling Jobs, Alerting and Maintaining SSIS packages.
* Designed SSIS packages using Lookup Transformations, Merge Joins, Fuzzy Look Ups, and Derived Columns with Multiple Data Flow Tasks.
* Created complex Stored Procedures, Triggers, Functions, Indexes, Tables, Views and other SQL joins for applications following SQL coding standards.
* Supported and maintained the existing SSRS reports and responsible for source code fixes
* Created the reports and data extracts from SQL server using Excel pivot as per user requirements.

***Environment:*** *MS SQL Server 2014/2012, SQL, SSIS, SSRS, Power BI, Power Pivot, MS Excel*