
Objective

To maintain a challenging position that utilizes my extensive hands-on experience in Data Engineering, and to utilize my skills in problem solving, application and database design/architecture, data pipeline design and processing, machine learning implementation, database development, business intelligence, data virtualization, reporting and maintenance.

Professional Experience Summary

- 15+ years of experience in the IT field, using various programming languages, developing solutions.
- 4+ years of experience on Azure Cloud and various Linux Hosting platforms.
- OLTP and OLAP database design, development and maintenance,
- Data virtualization & reporting tools like PowerBI, Tableau, SSRS, MS Excel etc.
- Application development with Object oriented programming languages like C# and Java
- Technical and business-oriented documentation (flowcharts, data dictionary, database diagrams etc.)
- RDBMS concepts and constructs along with Database Objects creation such as Tables, User Defined Data Types, Indexes, Stored Procedures, Views, User Defined Functions, Cursors and Triggers.
- Complete life cycle of ETL/SSIS Process (Requirement, planning/design , Development, Testing, Deployment, Scheduling, Troubleshooting and monitoring) for performing Data transfers across different data points
- Transact SQL (T-SQL) queries, Sub queries, Dynamic SQL queries (Stored Procedures, views, ad-hoc reports etc.)
- Data Warehouse design, implementation, data processing, reporting.
- Azure DevOps, code version control, CI/CD, release management, Agile sprint and task control
- Database Administration, backup restore, scheduling, data and schema compare, user management

Technical Skills

Languages	- C#, Python, T-SQL, PHP, JavaScript, TypeScript, CSS, Java, DAX		
Cloud	- Microsoft Azure and Azure Cloud Services, Power Apps		
Database & Tools	- MS SSMS (2022 and previous versions)	- SQL Profiler,	- RedGate Tools
	- Oracle	- Query Analyzer	. SQL Backup,
	- MS Access	- SQLite	. Data Compare,
	- MongoDB	- MySQL	. SQL Compare,
		- phpMyAdmin	. Dependency Tracker,
		- MySQL Workbench	. SQL Toolbelt
Platforms	- MS Visual Studio (2022 and previous versions), MS Visual Studio Code		
	- PyCharm, Notepad++		
	- MS TFS / Source Safe, GitHub		
	- Windows, Microsoft Azure Portal, Azure DevOps		
Other	- Linux, cPanel, Eclipse		
	- Machine Learning,	- Various FTP Clients	- Agile / Scrum,
	- MS Project,	- Batch Processing	- AutoCAD,
	- Salesforce,	- Kleopatra (Open PGP)	- Photoshop, GIMP
	- MC CRM Dynamics	- MS Office,	- Joomla, Wordpress
	- SSIS	- PowerBI	- Crystal Reports

Experience

Computer Systems Manager (Senior Data Engineer)

May 2015 – Present

NYC DCAS DEM

New York, NY

- Worked on a project calculating billing data for future predictions to prevent error billing. Machine Learning processing implementation (Python app using mainly pandas, numpy packages and KNN algorithm)
- Worked on a project on Azure Cloud processing and automating of solar data from IoT devices to a cloud db.
- Did research and analysis, working closely with business users to optimize integrated data flow in new Data Warehouse and later involved in report design requirement gathering.
- Created design documentation, like flowcharts, diagrams using Visio
- Created documentation (ETL data mapping, data dictionary, database diagrams etc.)
- Developed and deployed SSIS packages for ETL from OLTP and various sources to staging and staging to Data warehouse using Lookup, Derived Columns, Conditional Split.
- Created database objects including tables, triggers, views, stored procedures, Indexes and Functions.
- Worked on improving SQL Server performance by using index tuning wizards, performance tuning methods, execution plans and profilers, query analysis and parameterization, code optimization
- Designed dashboard reports pulling data from new and existing data sources.
- Generated, developed and tested new permanent business reports based on given business rules.
- Administered databases, maintenance, scheduling jobs, backups, restore, user management and version upgrade
- Experience with complete life cycle of ETL/SSIS Process (Requirement, Planning, Development, Testing, Deployment, Scheduling, Troubleshooting & monitoring) for performing Data transfers across platforms
- Generated ad-hoc reports using T-SQL queries, sub queries, Dynamic SQL queries as needed. (Stored Procedures, views, functions, ad-hoc reports etc.)
- Experienced in improving SQL Server performance by using index tuning wizards, performance tuning methods, execution plans and profilers, query analysis and parameterization, code optimization
- Designed, developed, deployed and scheduled ETL projects.
- Documented and clarified business requirements of existing processes.
- Processed over 50 million rows of data to database from text files and created PowerBI analysis reports for business users to export with custom filters.

Data Engineer

Dec 2014 – May 2015

NYC DCAS DEM / Spruce Technology

New York, NY

- Worked on existing Crystal Reports to make sure they are running and giving the same results after switching to new database structure, asserted versioning with effective start and effective end date for each record.
- Created new stored procedures and functions to retrieve same data as they are running against legacy databases.
- Altered, updated and tested billing data load process, related database objects to reflect business needs.
- Worked on uploading digitally received billing files to server and processing them to production tables.
- Worked on a project which needs data transformation with encrypt and decrypt data requirement, built SSIS package for the data extract and transformation.
- Worked on a SSIS project that requires FTP access and email notification for the process details. Wrote C# script to handle read files via FTP and emailing process.
- Researched possible MongoDB implementation use cases and did a presentation for IT users to consider in their existing or future projects.

Database Developer

Oct 2009 – Dec 2014

NYC HRA / QED National

New York, NY

- Developed a new system to process SRO Billing payments, using SQL SSIS
- Made analysis on the database and identified out data issues, prepared necessary queries to make the production database more stable and accurate.
- Designed and developed customized reports upon manager's requests.
- Converted existing DTS packages to SSIS packages.
- Convert SQL Server 2000 stored procedures to SQL Server 2005 stored procedures and make sure they all return the right data as they returned before.
- Generated fixed width and comma separated files using previously built systems and makes sure they are transferred to related servers.
- Checked the database if previously scheduled tasks are running fine or not, find out the problem for the tasks failed. And makes sure the scheduled database task is running fine as before.
- Built scheduled tasks to track changes on critical tables in the system.
- Worked on a project which calculates Social Worker Performance and returns a detailed report.
- Generated Batch Files and writes scripts to transfer, rename and backup files between servers.
- Optimized performance through proper database design and coding standards, as well as tuning of existing procedures, indexes and aggregations.
- Involved in extracting the data using SSIS from OLTP to OLAP
- ETL Processing and reporting. (Extract, Transform, Load)
- Leded an iPad web application project (Inspection Module for larger application)
- Generated density map and ad-hoc query reports
- Handled Data Migration for new projects.

C# .NET Application Developer

Jan 2007 – Oct 2009

NYC HRA / RFCUNY

New York, NY

- Participates in a project developing multiple ASP.NET Web applications using C# in .NET 2.0 and Microsoft SQL Server 2005 as a back-end storage.
- Created database schemas, stores procedures, triggers, data transformation packages, and indexing using.
- Designed and implemented software libraries (APIs) to be used in different system interfaces
- Used NUnit for unit testing and set proper configuration management.
- Designed multi-tiered and distributes applications with special consideration to application security.
- Built SSIS Projects to migrate data from Oracle database to SQL Server database.

Database & Report Developer

Feb 2005 – Jan 2006

Local Daily Newspaper

New York, NY

- Assisted in design of a subscriber database to store and reuse subscriber's data,
- Evaluated and modified tables, queries, and reports for company's requirements
- Created daily reports that were optimized for business performance and print house
- Improved efficiency of databases by employing database techniques such as indexing, normalization,
- Tested previously developed statements, queries and documented these for future use.

Education

Brooklyn College / CUNY <i>Master of Science in Computer Information Systems, 2008</i>	Brooklyn, NY
Sakarya University <i>Bachelor of Engineering in Industrial Engineering, 2003</i> <i>Thesis Work, "ERP Roadmap"</i>	Sakarya, TURKEY

Training & Certifications

• Microsoft Certified Professional (Certification No: F260-7315)	Microsoft
• Microsoft Specialist – Programming in C# (Certification No: F260-7317)	Microsoft
• MongoDB Training	New York City
• Angular 6 Training	New York City
• PowerBI Design Development	Microsoft Technology Center, NY
• Scrum Training	Citywide Learning & Development, NY
• Application Lifecycle Management	Citywide Learning & Development, NY
• ADO.NET Training	Metrotech Center Brooklyn, NY
• ASP.NET 2.0 Training	Metrotech Center Brooklyn, NY

Please continue to review my project based resume..

References can be provided upon request.

Thank you...

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My Recent Projects (Projects I have worked in my last position)

- **EC3 (Energy Cost Control and Conservation) (Team Project)**

On-going project that has sub projects within. (Most of the following projects) I led the subprojects, designed, developed and maintained the periodic processes that feed or source this system.

- Designed and created architecture for sub systems, the application consists of multiple .Net projects within, mainly became a .Net Core 6.0 application after migrating from legacy version. Using SQL Server Database.
- Led the project in all and established guided bi-weekly business meetings to collect feedback.
- Created multiple new reports and deployed in the application, as downloadable extracts or on screen reports.
- Maintained and processed monthly electronic bill handling.

- **Temporal Table / Data Versioning Project**

Reduced redundant data by ~%90 and optimized storage and increased report speed performance

- Custom table versioning (Temporal tables) is implemented in existing table structure
- Used MD5 hashing to track the changes in specific columns
- Implemented data compares between legacy and the new tables making sure to get the same results.
- Implemented speed and storage performance analysis checking reports content and performance.
- Implemented clustered and non-clustered indexes to improve performance.
- In the later projects I used SQL server built-in system-versioning

- **Energy Datawarehouse design and development**

Created Single Source of Truth, aggregated the data from different energy units in one single location, Energy Datawarehouse

- Identified issues, researched the need and designed the data warehouse
- Created the database, tables and the structure, the biggest table has more than 21 million rows of data.
- Developed the scheduled and manual feeding process using SSIS from different sources.
- Managed, improved and maintained period loads as needed.

- **API Applications (REST) (Team Project)**

Led projects and helped with database design and code review. Collecting and distributing the energy data.

- For all API projects, Azure Devops is used for version control and as code repository.
- Electric Interval Data Collection - Client
 - Collecting 15 minute interval smart meter energy data from external vendor
 - .Net 4.8 Application with SQL Server database
- Solar Interval Data Collection - Client | .Net 4.8 Application with SQL Server database
 - Collecting 15 minute readings from multiple external vendors
 - .Net 4.8 Application with SQL Server database
- Servicing EDW Data for Agencies - Server | .Net 4.8 Application
 - To serve data to other agencies and departments
 - .Net 4.8 Application with SQL Server database

- **Multiple SSIS Data migration and data sync projects**

Designed, developed, deployed and scheduled multiple SSIS projects for various departments

- Different data sources like text files, PDF files, SQL server, Salesforce, MongoDB etc.
- Data manipulation, transformation and filtering within SSIS

- **Anomaly Detection Application and Reports (Team Project)**

Created a ML application and a PowerBI report to identify Billing anomalies going through over 10,000 utility bills.

Saved the city many dollars with deviation reports and detected anomalies.

- Developed as a Machine Learning Application using Python as a POC then became a permanent application.
- We used the K-nearest neighbors (KNN) algorithm, as the core of the program.
- Main processing libraries we used, other than the helper libraries were sklearn for processing, GradientBoostingRegressor() from sklearn to train and predict, explained_variance_score from sklearn to find out accuracy and pandas for data handling
- Source and the output data is stored in SQL database and a PowerBI report is created for business use.

- **Crystal report analysis and report migration**

Extracting report Logic from crystal reports in order to design on screen reports within the application.

- **Building Information Systems Project (Team Project)**

Participated in project management, developed data migration, designed the database, implemented system versioning.

- Helped planning and designing architecture of the application which is built with .Net Core 6.0 in the backend and SQL Server 13 in the database. Metronic theme is used for frontend.
- Created a data migration process from access databases to SQL server.
- Created standard reports and adhoc extracts within the application in order to help with Benchmarking.

- **Budget Application Enhancement**

Enhanced the application with Billing system integration for better and easier budget preparation

- Integrating Budget system to active billing system to get actual usage and billing data
- Logical improvements implemented based on new Business requirements.

- **Invoicing Application Enhancement**

Implemented data sync using SSIS between communicating systems

- SSIS package data automation between Invoicing and Accounts Department
- Multi-Year Contracts handling logical updates implemented.

- **PowerBI Dashboard Report Design**

Created multiple visual dashboard reports for different units and provided PowerBI training.

- **PowerBI Integrated Web Application POC**

Developed a .NET Core POC application embedding and integrating PowerBI

- Implemented Row Level Security (RLS) to filter data based on user login
- Implemented communication between powerBI and the application
- Demoed creation, deployment and sharing of the report for end users.

- **TFS to Azure DevOps Application Migration & SQL Server Upgrade from 2008 to 2016**

Helped migrate all the applications from TFS to Azure DevOps and designed the branching strategy. (~10 applications)

Deployed all databases from 2008 to 2016 (~10 databases)

- **Data Dictionary and Application documentation**

Created technical and business documentation for both new developers and business users who join the IT and business units.

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