

OBJECTIVE

To obtain a challenging data engineering position where my resourceful experience and background will facilitate mutual growth, while making a significant contribution to the success of my employer.

DATA EXPERIENCE

Tompkins Applied Technology

Data Engineer

2018 - Now

- Designed robust and scalable data pipelines for our Warehouse Execution System (WES) automating ingestion and processing of both structured and unstructured data into cloud data warehouse (Amazon RDS) using both batch and stream data processing.
- Designed hybrid data warehouse (on-premise and cloud) to economically support multi tenant near real-time reporting service.
- Implemented best practices and Kimball Modeling Techniques in the modeling and design of the enterprise cloud data warehouse architecture expanding the company's reporting capabilities in a practical, yet cost-effective, solution.
- Leveraged the existing on premises messaging system to accelerate the move from batch processing to stream processing.
- Built many POCs to validate possible solutions to our company's future data product needs. These POCs often lead to reference architectures for our products.
- Serve as a mentor to the development team's modeling and performance requirements including performance tuning, data access patterns, SQL refactoring and rewrites.
- Provide hands-on expert level assistance to the organization on technical issues using ad-hoc diagnostic reports root cause discovery and problem solving.

Oracle

Senior Application Developer - Knowledge Management

2016 - 2018

- Served as Data Model Manager for the Fusion Knowledge Management Product Suite. Enforcement of modeling standards and change management ensuring the highest quality and performance levels.
- Focused development of the Core Team's data-related tooling covering data transformations, data migrators, data validation and testing, and real-time analytics processing.
- Ambassador of open source technologies such as Continuous Integration, SQL Notebooks (Zeppelin), data management tool (Liquibase) and build automation.

Business Intelligence Lead Engineer - Fusion Applications

2011- 2015

- Created an Oracle OBIEE equivalent report suite to MicroStrategy reaching parity between suites.
- Integral member of data warehouse modeling and planning team.
- Established change management automation for warehouse modeling.
- Designed and implemented unit testing suite for new reports.
- Implemented test automation workflow for ETL jobs in Oracle Data Integrator (ODI) using continuous integration practices on a multi vendor (Oracle, MS, MySQL) database environment.

- Writing dedicated SQL suite of scripts for report inefficiencies root cause analysis and validation.

InQuira (Acquired by Oracle 2012)

Analytics Engineer

2009 - 2011

- MicroStrategy report development and support.
- Lead BI project build automation effort.
- Maintenance of custom Java ETL process.
- Database performance optimization for reporting suite.
- Did case study for traditional development versioning of MicroStrategy portion of Analytics.
- Did case study for custom installer for analytics using open source IzPack and Maven.
- Artifact documentation for conversion from home brewed ETL to Informatica.
- Designed, developed and maintained OLAP cube infrastructure for MicroStrategy reports.

Foreign Currency Exchange

Senior Application Developer

2006 - 2008

- Designed and implemented fully customizable hierarchical permissions based security system.
- Designed and implemented dynamic menuing system based on user permissions.
- Development and integrations of enterprise banking software with third party vendors such as FedEx (Shipping), Department of Treasury (Office of Foreign Asset Control), Metavante (bank to bank integrations) and RSA (Federated Identity Management).
- Multiple currency ad hoc sql reporting for currency exchange rates trending valuated twice a day.

ERA Europe

Senior Database Application Developer

2004 - 2006

- Developed an analytical suite for tracking, reporting and decision making using website traffic, user visit patterns, property buying metrics and billing system modeled after Google Analytics for more than 2000 real estate brokers.
- Created REST and XML data transfer system for real estate properties between various broker inventory software and one central property management system.
- Designed and retrofitted a multiple language infrastructure to enterprise real estate application.
- Administered Microsoft SQL Server Cluster and Reporting Services backend.

Independent Contractor

1999 - 2004

- Database specialist in data modeling, planning and query performance tuning.
- Developed financing reporting suite for national photo development laboratory.
- Developed administration system for online photo-retrieval internet application.
- Designed and developed Choropleth visualization with Adobe Flash and Google Maps to interpret large amounts of data.
- Supervised Flash and Google Analytics integrations for national content delivery network (CDN).

EDUCATION

University Of Central Florida
Bachelors Of Science, Civil Engineering

Orlando, Florida

SKILLS

Proficient: SQL, PL/SQL, T-SQL, Tableau, ANT, Apache Zeppelin, Oracle OBIEE
Familiar with: Jupyter Notebooks, Python, Java, R, ElasticSearch, Logstash, Kibana, MicroStrategy, Flyway, Vagrant, LiquiBase, Oracle ODI, Pentaho Kettle
Databases: MySQL, AWS RDS, Oracle, Microsoft SQL Server, MongoDB

PROJECTS

Data Pipelines with the ELK Stack

<https://mtalavera.wordpress.com/2017/11/20/plantstation2-logging-with-logstash/>

Kaggle Competition - Grupo Bimbo Inventory Demand

<https://mtalavera.wordpress.com/2016/09/25/kaggle-bimbo-group-wrap-up/>

Movie recommendation system

<https://mtalavera.wordpress.com/category/movielens/>