**Kelly Shen**

**Senior Oracle PL/SQL Developer**

**Summary:**

* 8+ years of experience as an Oracle PL/SQL Developer, including System Analysis, Design, Development & Support of Oracle Database 12c/11g in Production, Staging, Development, and Testing Environments
* Extensive knowledge of Relational Database Management Systems (RDBMS) as well as **Data Warehousing**，including **Star Schema and Snowflake Schema**, and **Data Marts** used in relational and dimensional modeling
* Experience in drawing various data models, such as **E-R Diagram**, **Data Flow Diagrams/Process Diagrams** using ER WIN, Oracle data modeler and MS VISIO
* Expert experience in writing SQL queries and PL/SQL Development, Stored Procedures / Functions/ Packages / Database Triggers, Exception Handlers, Cursors, PL/SQL records, and Pipeline Function
* Strong experience in creating **Materialized views** for improving performance
* Proficient in using **Bulk Collect** and **Forall** for mass update as performance improvement process
* Hands on experience with **Dynamic SQL**, **ref Cursor**, collection object, **Global Temporary Tables**, Data Base links and Partition Tables
* Knowledge of various packages, such as **DBMS\_SCHEDULER, DBMS\_XPLAN, DBMS\_STATS, DBMS\_OUTPUT and UTL\_FILE**
* Experience in creating complex mappings using various transformations, and developing strategies for Extraction, Transformation and Loading (**ETL**) mechanism
* Experience in using utilities like **SQL\*Loader** and Data pump, Import/Export, Oracle Migration workbench
* Proficient in query level performance tuning using **Explain Plans**, **Hints**, SQL Trace and TKPROF utilities to pinpoint and fix time consuming SQL's
* Experience in loading high volume data and tuning large table performance by using **Partitioning**, **Indexes**
* Experience in **Unit Testing**, writing test plans and test cases
* Strong Experience in Writing PERL, **UNIX Bash** and **KornShell** scripts to automate various Processes
* Proficient in creating Shell Scripts for invoking SQL scripts and scheduling them using **Crontab**
* Experience in releasing the enhancements and code fixes into various environments through the process of **Release Deployment**
* Good Experience in creation of Quality related **Documents** (Function specification, design document (DB design architecture) and installation qualification (for implementation of the code) and Unit Test Case, Operational qualification and procedural qualification documents)
* Extensive experience with IDEs such as**TOAD, SQL\*PLUS, and PL/SQL Developer**
* Experience in maintaining different versions of code using various **Version Control** tools, such as CVS, SVN
* Hands on experience in using different Statistical tools such as **SAS, R** and data visualization tools such as **Tableau**
* Excellent communication, interpersonal and presentation skills
* Excellent team player with the ability to work independently and interact with people at all levels

**Skill Set:**

Languages: SQL, PL/SQL, UNIX Shell Scripts Programming, R, SAS

RDBMS: Oracle 12c/11g/10g/9i, MS-SQL Server 2000/2005, MySQL

GUI: Oracle Forms & Reports 11g, SQL\*Loader

Database Tools: SQL PLUS, TOAD, and SQL developer

Operating Systems:Windows XP/7, Windows Server 2008 and Linux (Redhat/Ubuntu)

Data Visualization Tool: Tableau

**Project Summary:**

**American Express, New York, NY January 2015 to Present**

**Sr. Oracle PL/SQL Developer**

Description: Cornerstone is American Express’s global data platform which is powered by Big Data and is a critical enabler of innovation and growth for the company. The vision for Cornerstone is to centralize data across the company with strong built-in governance, democratize access to a broad user community and accelerate innovation and cost efficiencies through data and platform integration on Cornerstone.  
Responsibilities:

* Involved in all phrases of a project, including gathering requirements, creating specifications, development of database objects, developing code and validating programs and production support
* Worked on **Agile Scrum Methodology** to meet timelines with quality deliverables
* Developed various database objects like **object types, trigger, procedures, functions and packages**
* Extensively used features like **autonomous transactions, bulk load methods, optimizer Hints**, Cursor variables and returning of multi record set from procedures and functions
* Worked extensively on **Exception handling** for proper display of error message to the user and debugging
* Created **UNIX shell scripts** to automate data loading, extraction and to perform regular updates to database tables to keep in sync with the incoming data from other sources
* Worked on **SQL\*loader** to load data into database, which is called CDM, from files received from Business Tech Team and manipulate the data
* Used techniques like **Direct Path Load**, for loading the data faster and created filters in Control files to pre-process data, as part of performance tuning
* Created and used Table **Partitions** and Sub partitions to further improve performance while loading daily feeds of sizes 10 - 14 GB (80 million to 120 million data set) into tables
* Implemented **Sub partitions**, **CTAS** (Create Table as Select), **Exchange partition** to load data into target tables
* Performed SQL and PL/SQL tuning and Application tuning using various tools like **EXPLAIN PLAN, AUTOTRACE, SQL\_Trace and TK Prof**
* Created **B-Tree indexes, Function-based indexes, Bitmap Indexes** on Tables, columns to minimize query time and achieve better performance
* Responsible for ensuring that the system is delivered as per the requirements stated and conducting various testing includes **Unit testing, integration testing and performance testing**
* Provided timely technical resolutions for defectsandprovided quality operations support for production environment
* Provided support and assistance to Data Ingestion Team with loading data into Cornerstone, the Big Data platform
* Prepared various **Documents** such as Program Specifications, Design Documents that includes LLD, HLD, Database design and Unit Test Specifications

Environment: Oracle 11g, UNIX shell, SQL Developer, Toad & Windows 7

**CTBC Bank, Edison, NJ November 2012 to October 2014**

**Sr. Oracle PL/SQL Developer**

Description: CTBC Bank offers a broad array of retail, small business and commercial banking products. Services provided include issuance of letters of credit as well as real estate and construction loans.

Responsibilities:

* Involved in the **database design** for better understanding the relations, associations and dependencies within the database
* Wrote complex **SQL queries** to extract data from various source tables of data warehouse
* Designed and developed Oracle PL/SQL **Procedures, Functions, Database Triggers** and involved in creating and updating **Packages** to meet business requirements
* Involved in the **ETL** process of developing new tables from the existing views and materialized views
* Loaded data into Oracle using **UTL\_FILE, SQL\* Loader** and extensive use of **External Tables**
* Used various Oracle build-in packages like **DBMS\_STATS** to collect statistics of many different kinds as an aid to improve the performance and UTL\_FILE to read and write operating system text files
* Used **PIVOT, UNPIVOT, LISTAGG** and many functions in Oracle 11G to transform complex source data as per mappings
* Created various **Function Based Indexes** to significantly improve performance
* Extensively used **Bulk Collect** to insert and update huge amount of data into target databases
* Extensively used **Explain Plan** and **TKProf** utilities to fine tune and improve the performance of application
* Created various **UNIX Shell Scripts** for scheduling various data cleansing scripts and loading process
* Worked closely with end-users and team members to understand business requirements that drive the analysis
* Designed **Technical Design Document** based on the business requirements
* Participated in Peer code reviews and verifying coding standard
* Responsible for requirements gathering from Clients and implement the back end changes in existing product and in designing the database

Environment: Oracle 11g, SQL, PLSQL, SQL\*Loader, UNIX, TOAD

**Sony Corporation of American, Park Ridge, NJDecember2011 to September 2012**

**Sr. Oracle PL/SQL Developer**

Description: Sony Music Entertainment also called SME or Sony Music is the second-largest global recorded music company of the "big three" record companies and is controlled by Sony Corporation of America, the United States subsidiary of Japan's Sony Corporation.

Responsibilities:

* Understand the Business requirements and convert them into technical specification
* Written **complex SQL**'s using joins, sub queries and correlated sub queries in Oracle accordingly
* Created database objects such as Stored Procedures, Functions, Packages, Collections, Cursors, **Ref Cursors, Constraints**, **Views**, **Database Links** and user-defined data types
* Created Custom **Triggers** on Application tables to keep track of changes for Auditing in AOMA application
* Implement various advanced features of Oracle such as **Table Partitioning**, Indexing strategies, **DBMS\_Scheduler** according to the requirement
* Used Concurrent Version System (**CVS**) Plug in along with Eclipse tool so that all the developed scripts are checked in, checked out accordingly for any future production build so that different
* Used **Collections**, **Bulk Binds** to improve performance by minimizing the number of context switches between the PL/SQL and SQL engines
* Developed **Unix Shell Scripts** with embedded SQL\*Loader calls and PL/SQL statements to extract data from the legacy application in the form of flat files and load the extracted data into the new application
* Provided insights into **Performance Tuning**, Analysis, and Troubleshooting of the DB layer of the application
* Documented the work by creating various reference manuals for reference by future testers and users
* Participated in the QA process through code review, test case and release notes preparation
* Prepared and Executed **Unit Test Plan** and Unit Test Cases
* Performance enhancement and bug fixing of database objects

Environment: Oracle 10g, 11g, MS SQL Server 2012, TOAD, SQL Developer

**UnitedHealth Group, Albany, NY October 2010to September 2011**

**Oracle PL/SQL Developer**

Description: UnitedHealth Group is one of the largest health care providers in the United States. UHG offers a spectrum of products and services through its family of subsidiaries and divisions. The project was to automate the HR department of UnitedHealth Group. We aimed at minimizing the paper work that normally needed to be maintained. Our goal was to make the day-to-day operations easier for the department.

Responsibilities:

* Analyzed the business requirements of the project by studying the Business Requirement Specification document
* Created database objects like tables, indexes, views, packages and procedures using **Toad**
* Extensively worked on developing custom **packages** using Oracle PL/SQL for various business requirements
* Run batch jobs for loading database tables from Flat Files using **SQL\*Loader**
* Proactively **tuned SQL queries** and performed refinement of the database design leading to significant improvement in system response time and efficiency
* Prepared **program specifications** for PL/SQL Procedures and Functions to do the conversion
* Provide timely Production Support by quickly analyzing the root cause and by providing alternatives to resolve issues
* Supported operations during the build/deployment of a new release to the Integration, QA and Production environments
* Involved in **Technical Documentation, Unit test, Integration test** and writing the Test plan

Environment: SQL, PL/SQL, SQL\*Plus, SQL\*LOADER, MS SQL Server 2000, Toad

**Hainan Airlines, China, ShanghaiJuly 2008 to May 2010**

**ORACLE PL/SQL Developer**

Description:NARCAL is a cargo revenue accounting system. The basic purpose of this system is to manage the control, reporting, use and accounting of space, excess cargo weight. It will provide maximum efficiency in processing ticket data, and posting and billing accurate values and validates all transactions, and initiates recoveries.

Responsibilities:

* Involved in complete system development life cycle
* Involved in the team for documenting **functional and technical specifications**, including specifications for others to build
* Involved in modifying existing PL/SQL **Procedures, Functions** and developing new ones
* Wrote **SQL, PL/SQL, views and Bulk Collect**for implementing business rules and data transformations
* Developed procedures to run the **SQL \* LOADER** to load data from various sources in the form of Excel, CSV or flat files into the target database tables
* Developed **Error Logging and Data logging** to better understand the performance of the ETL procedures and to associate the errors to the procedures
* Wrote PL/SQL programs to read from files, upload data, and mass updates/inserts of data based on certain business policies
* Developed oracle **Reports, PL/SQL packages** to perform Certain Specialized functions
* Extensively used various data transformation functions of PL/SQL
* Responsible for writing Install Scripts for migration of code through various environments and implementing
* Extensively used tools like **TOAD, SQL developer**
* Involved in **Unit testing, Integration testing, System testing**, Regression and UAT testing along with other team members

Environment: Oracle 9i/10g(SQL, PL/SQL), SQL\*Loader, Windows, Toad, Unix

**EDUCATION**

* Master of Engineering in Project Management from New York University
* Bachelor of Engineering in Management Information Systems from Nanjing University of Aeronautics and Astronautics