

## Contact

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## Top Skills

Hadoop

Python (Programming Language)

Shell Scripting

# raghunath ramachandran

Big data , Oracle database, Java professional  
Fremont, California, United States

## Experience

### Verizon

#### Principal Data Engineer

December 2019 - Present (5 years 1 month)

Developed custom PL/SQL ETL pipelines for data ingestion of Terra bytes from LTE Network Equipment end points (ENM/USM) and aggregation using PL/SQL packages and procedures in Oracle v18c.

Responsible for creating SingleStore - Mysql database cluster and developing procedural SQL code for data ingestion and aggregation to measure Verizon's Network Services cell tower network performance.

Created Python/Bash scripts for scheduler and automation, refactoring and optimizing existing PL/SQL code base. Developed data model, ERD, selection of index keys, shard keys, database partition for optimum query performance.

On-call Production Support and provided technical assistance, problem resolution, deployment and troubleshooting production issues during off hours and weekends.

### Verizon

#### Sr. Data Engineer

March 2017 - September 2019 (2 years 7 months)

Developed high volume and scalable PL/SQL packages to extract and load rows (~1/2 TB/day data from all cell towers across US) from raw data/XML files into raw tables and aggregating into production tables on Oracle 12c for measuring Verizon Wireless LTE network performance.

Created data models by identifying keys and relationships between entities and created DDL, DML.

Tuned Oracle DB queries for high performance and scalability by reducing waits, CPU time, context-switching, optimizing in-line query and, I/O to disk.

Used Explain Plan, Database Profiler for identifying performance bottlenecks.

### Apple

#### Lead Engineer

August 2015 - March 2017 (1 year 8 months)

Developed PL/SQL procedures, Packages, Database design, Table partitioning, and triggers for Device Services, Carrier Services iphone

activation systems in continuous delivery deployment mode. Deployed code to Production and test environments and supported QA environments with test cycles. Identified poorly performing SQL using explain plan and improved SQL performance using hints, index. Used SQL Loader for loading data. Developed outage and deployment plan for DB upgrade, OS failover, Application upgrades. Created roles and privileges for role based application users. Created Python, Unix shell scripts for automating batch jobs.

## Pacific Gas and Electric Company

### Sr Data Engineer

October 2014 - July 2015 (10 months)

Developed PL SQL/packages for data loading, custom ETL, database design, data correction routines, baseline and performance testing for PG&E SmartMeter 5 Million electric and 5 Million gas customer meter readings and re-mediate/generate daily meter usage.

Performance tuning of SQL statements by using AWR reports and explain plan.

Used partitioning, materialized views, table functions, and Oracle hints to improve data processing performance. Responsible for building Big data solutions using Hadoop MR, Oozie, Pig, Hbase, Hive for PG&E customer portal to update internal data warehouse.

## Verizon Wireless

### Sr. Data Engineer

April 2012 - September 2014 (2 years 6 months)

Developed high volume scalable custom PL/SQL custom ETL packages to extract and load billions of rows (~50 TB) from raw data/XML files into staging tables and aggregating into production tables on Oracle 11G RAC for measuring Verizon Wireless LTE network performance and calculating KPI. Used Oracle partitioning logic, partition pruning to load from raw tables to staging tables. Increased database performance by optimizing database backend code, using materialized views, using partitioning, compression, updating statistics, AWR, ASH, and DBMS Scheduler. Developed core Java application, developed Unix shell scripts, developed Oracle expdp/impdp scripts for schema DDL for new schema deployments. Provided method of procedures (MOP) for deploying database changes to production and worked closely with production support/cross functional teams to debug business issues and develop root cause resolution. Identified functional requirements and translated into PL/SQL code and created unit test for each test scenarios. Maintained code base for multiple platforms including Verizon Terremark cloud

infrastructure and LTE, CDMA applications installed nationwide. Data analysis of Terabytes of data using Hadoop stack.

## Walmart eCommerce

Assoc Manager

May 2011 - March 2012 (11 months)

Production support for Order Management Systems and Finance application for Walmart.com global ecommerce application. Maintained or exceeded production SLA for trouble tickets from business and triage production issues by identifying existing processes and PL/SQL and Java application for various ordering channels available for customers in Walmart.com site. Recommend specific alarms and monitors to business to avoid issues and development of dashboards in PL/SQL for recurring database cleanup. Participate in emergency bug fixes and develop SQL, PL/SQL for data cleanup.

## Wells Fargo

Sr. Oracle Developer

December 2009 - April 2011 (1 year 5 months)

Developed PL/SQL packages, procedures, indexes, table partition for Wells Fargo Business Direct (BD) Datawarehouse application. Re-engineer existing sql code and converted into Oracle PL/SQL packages/procedures, SQL statements tuning, data load using sql loader. Developed Unix shell scripts to call SQL sessions and sql loader sessions. Develop Functional system document, Technical design document and associated data model for HAMP functionality in Bank Collection application.

## CVS Longs Drugs

Sr. Developer

September 2004 - May 2009 (4 years 9 months)

Created PL/SQL packages, procedures, functions, triggers for retail supply chain areas of Pricing, Costing, Stock Ledger, Inventory, Promotion and Order Management.

Developed applications for supply chain for Retail Ver 10 using Oracle RDBMS 10G R2, 9i R2, Java, JDBC, Informatica ETL, Crystal reports, Unix shell scripting and Pro C.

Created physical data models and implemented physical database schema and scripts to create database objects. Knowledge of data warehouse architecture and data marts.

Analyzed data inconsistency and performed corporate wide data cleanup using SQL, PL/SQL. Analyzed and tuned SQL for optimal run using Oracle hints,

Materialized views, Table partitioning, parallel queries, Bulk DML loading/retrieval and using Oracle trace.

Analyzed batch process and batch integration and be a subject matter expert in certain areas to help defect tracking and triage issues for answering internal and external customer quires.

Supported and executed tasks during a major application roll-out and major enhancements. Created scripts for database DDL, DML related changes and diagnosed database issues after application upgrades.

Created and modified batch schedules in BMC Control-M by managing job dependencies, timing, exit condition for hourly, daily, monthly, half-yearly, yearly schedules.

Tier two 24/7 production support for enterprise supply chain applications for merchandize ordering, allocation, promotion, pricing, forecasting and inventory system.

## Longs Drugs Stores

5 years

Support Analyst - Supply Chain

2004 - 2009 (5 years)

Support Analyst - Supply Chain

2004 - 2009 (5 years)

Oracle database development, Production support, Informatica, SQL tuning and batch, shell scritioing

## Butler America

3 years

Sr Database Developer

1998 - 2001 (3 years)

Sr Database Developer

1998 - 2001 (3 years)

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## Education

George Mason University

M.S, Information Systems

B.S, Electrical Engineering