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 **Sydney Australia**

**CAREER OBJECTIVE**

To build a challenging career in the software field with comprehensive knowledge of software techniques and utilizing my skills and contributing towards the goals of the Company. I am seeking to work with a reputed software company to achieve new levels of competence and continue to work as an individual contributor role in DB product development organization.

**CAREER SUMMARY**

* **Total 10 years of experience of Requirement Gathering, Designing Solutions, Programming, Debugging, Testing, Project Maintenance and Enhancement.**
* Mostly worked in **Database Products development and maintenance** including PostgreSQL Oracle’s MySQL Server, DB2 and Vaman Data Server.
* Currently working as a Individual contributor and Leading a team at  **Wipro Technologies.**
* Strong knowledge of **C, C++ on UNIX(AIX), LINUX and Windows OS,PostgreSQL, MySQL and DB2.**
* Strong exposure in **Database Internals(DB Internals).**
* Good knowledge of **Data Structures, Algorithms, Performance Engineering( DB Performance tunning and DB Performance optimization ), NoSQL and SQL Query optimization.**
* Excellent **Analytical and Problem solving skills.**
* Experience in complete software development through design, coding, testing, integration and deployment.
* Good hands on experience in development of platform service applications through **multi-threaded programming using POSIX compliant IPC(Inter Process Communication)**.
* Experience in **AGILE(SCRUM)** Methodology of working.

**TECHNICAL SKILLS**

Languages : **C, C++,** Shell Scripts

Platforms : **Unix(AIX), Linux, Windows**

RDBMS : **Database Internals, PostgreSQL, MySQL, DB2**, **VAMAN DataServer, PL/SQL**

Methodology : Agile, FSM (Finite State Machine) Logic, **Data Structures and Algorithm**

Source Code Mgmt : Clear Case, VSS, SVN, Bazaar, Git

Tools : GDB, DBX, IDE, GitHub, Valgrind, JIRA, Tprof, Ctrace, Dtrace, Truss

**EDUCATION AND TRAINING**

* **FPGDST** (Full Time Post Graduate Diploma in Software Technology) Year 2001.

From **CDAC** (Formerly National Centre for Software Technology (**NCST**)), Bangalore (Karnataka)

* Bachelor of Science in Mathematics (B. Sc.) Year 1996.

 From **Devi Ahilya University (DAVV),** Indore (M.P.)

**PROJECT SUMMARY**

**Wipro Technologies ( Fujitsu Australia customer ) From June 2014 till date**

 **Designation : Technical Lead**

**Role**  **:** Individual contributor for PostgreSQL development at Fujitsu Australia and leading the offshore team

**Environment** **:** C, C++, Linux, GIT, PostgreSQL Opensource

**Team Size :** 10

**WORK PROFILE**

Working as a Individual Contributor on-site at Fujitsu Australia and Leading the offshore team in India.

**PROJECT DETAILS**

**Parallel Query Execution in PostgreSQL**

PostgreSQL server is one of the best open source RDBMS.The project is all about the Parallel Execution of SQL queries in PostgreSQL database engine, Primary focus is to divide a single backend process work in multiple background worker processes to get the query execution done in parallel. This Improves the query performance drastically.

**UST Global ( Dell International Client ) Hyderabad From June 2013 – May 2014**

**Designation : Senior System Analyst**

**Role**  **:** Individual Contributor

**Environment** **:** C, C++, Linux, SVN, Valgrind, JIRA

**Team Size :** 15

**WORK PROFILE**

Worked with the core development team in India and remote located team in US for Dell security product called Secureworks.

**PROJECT DETAILS**

**Dell Secureworks**

Dell SecureWorks is a security product of Dell which provides world-class IT security services to help organizations of all sizes to protect their IT assets, comply with regulations and reduce security costs. Standard security technology used for establishing an encrypted link between a web server and a browser. This link ensures that all data passed between the web server and browsers remain private and integral. Optimizing the portal code for Secureworks customers.

**Oracle Ind Pvt Ltd, Bangalore From July 2011 – August 2012**

 **Designation : Senior Software Engineer**

**Role**  **:** Individual contributor for development and maintenance of MySQL Engine components

**Environment** **:** C, C++, Linux, Windows IDE, Bazaar version control, Valgrind

**Team Size :** 12

**WORK PROFILE**

Working as a part of one of the MySQL database server development team called server general team. Server general team is responsible for development and sustenance of MySQL database engine. Predominantly worked in enhancement and bug fixing of Federated and Innodb table partition storage engine of MySQL database server.

**PROJECT DETAILS**

**MySQL Server Development and Maintenance**

MySQL server is one of the best open source RDBMS product combination of several storage engines like Myisam, Innodb, Federated etc. The MySQL database software is a client/server system that consists of a multi-threaded SQL server that supports different backends, several different client programs and libraries and a wide range of application programming interfaces (APIs).Its speed and security make MySQL server highly suited for accessing databases on the Internet. MySQL server has embedded multi-threaded library that can be linked into application to get a smaller, faster, easier-to-manage standalone product**.**

**Maple Infotech Pvt Ltd, Noida From October 2009 – April 2011**

**Designation : Senior Software Engineer Role** **:** Design, Development and Maintenance **Environment :** C, C++, Linux, Shell Script **Team Size :** 8

**WORK PROFILE**

As an individual contributor I got a very good opportunity to work on research and analysis of NoSQL database for social cum commercial networking site for fast data retrieval. As a part of development team I was also involved in implementation of GUI for various hardware devices of different categories using the C++ Standard Class Libraries. The project includes development and testing of all the middle ware components used by various XML modules.

**PROJECT DETAILS**

**Social cum Commercial Network Portal** The goal of the project is to involve the social network site users to engage in business and brand with his own interest. It also takes care on behalf of users like what type of messages they want to receive and how often they want to receive. Users are rewarded for their engagement with points that can be used towards discounts and offers from the available brands.

**GUI and Middle ware Component Development for Hardware Interaction**

The goal of the project is to create user interface for the Point I/O modules, making it easier for end-users to configure them. This would include HI design, development and testing of I/O configuration interfaces for all modules in the product lines.

**IBM Ind Pvt Ltd** , **Bangalore September 2006 – September 2009**

**Designation : System Software Engineer**

**Role** **:** Design, Development and Performance Engineering **Environment :** C, C++, OOPS, Unix(AIX), DBX, System tracing tools(Ctrace,Tprof,Dtrace), Clear Case **Team Size :** 15

**WORK PROFILE**

DB2 is a database engine provides data definition, manipulation service to OLTP, Embedded and DSS applications. I was working with the team which is responsible for sustenance and performance improvement of IBM’s DB2 product. Predominantly worked in LOB Inlining line Item of DB2 Database Engine. As a member of DB2 performance team I involved in running the TPC-C benchmark workload. Participated as an e Reviewer of SES (Software Externals Specification) and HLD (High Level Design) documents for some Line Items added in the server code. Working closely with remotely located development team and performance team in Canada. Used various IBM’s AIX tools for some performance issues.

**PROJECT DETAILS**

**LOB Inlining**

The project is all about the enhancement and performance improvement of DB2 database engine adding one Line Item, This line item is called **LOB (Large Object) Inlining**. LOB data of smaller size (less than one block size) has been managed in table’s row itself instead of allocating a new object.

**Sustenance and Performance Engineering of DB2 Database Engine**

As a team member of sustaining and performance team in ISL (Indian Software Lab) and remote performance team in Canada, The team was responsible for running various performance regression workloads. Performance is measured using DSS and OLTP Workloads. Analyze the performance degradation using performance monitoring tools either DB2 tools or system tools(CPU Profiling), Regular interaction with core developers after analyzing the cause of regression and some possible solutions. Interaction with customers for performance related issues. Bug fixing in various DB2 database engine modules which includes data storage in the database engine. Activity involved in improvement of performance (Optimizing Performance) of DB2 Database Engine.

**Sonata Software Ltd. Bangalore June 2005 – August 2006**

**Designation : Technical Consultant**

**Role** **:** Design and Development

**Environment :** C, Linux, GDB

**Team Size :** 3

**WORK PROFILE**

Worked as a member of development team for Gupta's SQLBASE database server. Actively involved in Design and implementation of a Database Migration Utility Tool to upgrade the existing database which is on older version to new database version of SQLBASE database server. Bug fixing of database server code.

**PROJECT DETAILS**

**Migration Utility Tool**

The goal of the project was to make a console based tool for upgrading the database which is on older version to the newly released version of SQLBASE database server. named pipe communication and multi threading approaches was used with server APIs load and unload for transferring the data. The utility was developed on Windows and porting the same on Linux.

**Vaman Technologies R & D Ltd. Mumbai April 2003 – January 2005**

**Designation : Software Engineer**

**Role** **:** Design and Development

**Environment :** C, Windows IDE, Linux, GDB, VSS

**Team Size :** 8

**WORK PROFILE**

Worked as a member of server side development team. Team was responsible for design, implementation and sustaining of Table object, Data dictionary, Data storage and Tuple preparation related modules of Vaman DataServer. Involved in optimization of server side modules. Participated in enhancement of tuple preparation and overflow tuple. Involved in sustaining Table object for various operation like create, alter and drop with various options. Implementation of temporary table.

**PROJECT DETAILS**

**Sustenance of Table Object module**

Table is a basic unit of relational database, which comprises of rows and columns. Project was on enhancing the functionality of table operation like creation and alteration with several options. Allocation of segment/extent to accommodate future data.

**Tuple and Data Storage Management**

Worked as a member of server team, the team was responsible for enhancement and bug fixing. Vaman DataServer keeps the data in form of tuples written in blocks. The activity involved are enhancing the tuple header comprises of fixed fields, variable offset & variable fields,tuple status like normal/overflow. Overflow tuples can't get accommodate in single block so it gets fragmented in across the blocks and keep track of block by maintaining chain Row ID in tuple header. Bug fixing in Buffer pool,Locking and Storage related components of Vaman DataServer.