Sanjaya Sahu

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SUMMARY OF QUALIFICATIONS

- 14 years of software engineering experience in online Payments and EDA (Electronic Design Automation) domain, with strong analytical skills and a broad range of software expertise.
- Strong development experience in C++, STL, UNIX systems, Java with good understanding of design patterns, Databases and IC physical design concepts.
- Played solution architect role at PayPal within its core payments group, architecting solutions for new products, platform enhancement initiatives.
- Played “domain tech lead” and “senior developer” roles for one of the key core domains in PayPal, designing and implementing several new features, that generated huge revenues for PayPal.
- B.Tech degree in Computer Science and Engineering from REC Warangal (now known as NIT Warangal) in the year 2002 with aggregate percentage of 77.8.
- A good problem-solver, able to quickly grasp complex systems and identify opportunities for improvements and resolution of critical issues.
- An effective leader, skilled in enlisting the support of all team members in aligning with project and organizational goals.
- Passionate about the work involved in and always willing to go extra miles to make sure its completion with highest quality.

PROFESSIONAL EXPERIENCE SUMMARY

Ooyala India Pvt Ltd, Chennai
Senior Manager, Engineering
Nov 2016 - till date

PayPal India Pvt. Ltd., Chennai
MTS1 Software Engineer (DTL/SolutionArchitect)
April 2013 – Oct 2016

PayPal India Pvt. Ltd. through CSC India Pvt. Ltd, Chennai

Associate Manager Projects (Technical Lead)
Oct 2010 – March 2013

Cadence Design Systems India Pvt. Ltd, Noida
Senior Member of Technical Staff (Lead Engineer)
July 2006 – Sept 2010

Mentor Graphics India Pvt. Ltd, Hyderabad
Member of Technical Staff
Sep 2002 – June 2006

EDUCATION AND TECHNICAL SKILLS

B.Tech, Computer Science and Engineering, NIT Warangal, A.P.
Completed in 2002 with 77.8% (Rank 10th in a class of 70)

Technical Skills:

Programming Languages: C++, Java, Spring, J2EE basics, Python, Node.js (basic), Shell Scripting

Design/Process: OOAD, Design Patterns, Agile Methodology, UML Modeling, Sequence diagrams

Special softwares/concepts: STL, Relational Databases, Multithreading, SOA, REST, No SQL DB basics from Cassandra and Couchbase.

Operating Systems: UNIX (Linux, Solaris, AIX), Windows, Mac

Source code Mgmt: Git, CVS, Clearcase

ACHIEVEMENTS AND OTHER ACTIVITIES

- Presented a paper titled “What’s possible with Scripting in DxDesigner” in Mentor Graphics’ Users conference named “U2U 2005” held in Santa Clara, USA in April 2005.
- Presented a paper on the new Mixed Signal flow in the Cadence India’s internal technical conference named “TECCI” in 2008.
- Submitted a paper related to the on-the-fly abstract generation technique in TECCI 2009.
- I have received “shining star” award at PayPal 3 times for exemplary leadership and contribution to important projects.

- I have received instant recognition awards three times in PayPal, five times in Cadence and twice in Mentor Graphics for extra-ordinary/exemplary contributions.
- I was part of the MACS (Make a child smile) group in Cadence that organizes various activities to help under-privileged children.
- Worked as one of the editors for the computer science magazine during my B.Tech programme.
- I secured 7th rank in Orissa Joint Entrance Examination in the year 1998.

DETAILED PROFESSIONAL EXPERIENCE

Ooyala India Pvt Ltd Chennai

Senior Manager, Engineering
Nov 2016 - till date

- Joined as senior manager for GES (Global Engineering Services) team.
- Primary responsibility is to design and deliver solutions for Ooyala customers on their specific customised requirements apart from what's there in the core set of Ooyala products.
- It's a technical manager cum architect role, where I am responsible for both design of the solutions plus to make sure that delivery happens on time, as per schedule and with top quality. Around 10 engineers will report to me.
- Ooyala just started operations in Chennai some 6-7 months back, so teams are getting built/hired. I am the first one to join in this team. My primary responsibility so far has been to hire rest of the engineers for my team and to make sure they are ramped up fast to be able to contribute on projects. So far, we have been able to roll out offers to 5 engineers.
- Directly contributing to a project for one customer (Mediaset) in one of the integration projects to store campaign management information at our server by picking up a file dropped to Amazon S3 by the customer. Building a REST service for this that is hosted on an EC2 instance.
- Developing a new REST service in Java, to be hosted on AWS, to generate custom reports for couple of customers making use of APIs from a third party SSP provider Fyber.
- Developing another application using micro service architecture to help migrate videos from other OVP vendors to Ooyala. We are trying to build the application with best monitoring capabilities which can easily be scaled and also easy to deploy. Its a joint effort between Chennai and Stockholm teams.

PayPal India Pvt Ltd, Chennai

MTS1 Software Engineer (DTL/SolutionArchitect)
May 2015 – Oct 2016

- Worked as solution architect in the Transaction Engine (TE) domain within core payments.
- In this domain, we are owner of multiple mid-tier services, some on C++ ; some on Java/J2EE using spring, hibernate ; As part of the business or platform requirements, we keep adding new functionalities to these services and occasionally add new component/package as well.
- As a solution architect, I collaborate with product managers, architects from other domains and engineers to design solutions in core payments space for various new products/features and platform improvement initiatives.
- Designed and delivered a scalable solution for marketplace integration when couple of new integration requests came from Etsy and Intuit. Both of the marketplace requirements were around a number of non-loginable child accounts receiving payments but a parent account controlling them and money getting withdrawn through it. Traditional MAM (merchant account management) solution had a bottleneck of not scaling beyond 10000 child accounts whereas the new integrations required child accounts in millions. Designed a solution to not perform real-time update of balance but using a payable concept that made accounting and settlement an easy job.
- Identified and implemented a series of compliance gaps in various flows that caused serious threat to PayPal from OFAC point of view. It needed us to fix all those before April 2016 so as for PayPal to not incur heavy penalties. I introduced a concept called “Special Deny” which is to be used for multiple pending scenarios. It needed to collaborate with all impacted teams throughout so as to make sure they understood the end to end solution and implementation from all domains were around the solution that was designed.
- Identified several gaps in our existing dispute handling system that was causing heavy yearly losses to eBay. Discussed with product managers to come up with several improvement ideas around Refunds and Recoupments process that is estimated to give eBay a saving of around 2M. One of the key ideas was to consider all kind of merchant balances during Refund and Recoupment processing, to make sure eBay reliably is able to recover money equivalent to the amount they would have paid already to buyers.
- As part of PayPal Financial transformation process, we came up with new data model aka STM for downstream consumption, breaking direct dependency of downstream systems on SOR (System of Record) of TE system. STM would get the data from existing SOR and data from other related systems to provide a consolidated view to downstream applications. I am leading an effort to make sure all existing inconsistencies in current system are identified and fixed before STM goes live.

PayPal India Pvt Ltd, Chennai

MTS1 Software Engineer at PayPal, Associate Manager-Projects at CSC (Technical Lead position)
Oct 2010 – till April 2015

- Worked as contractor for first two years through CSC India Pvt Ltd and then got converted to a FTE (Full Time Employee) after getting recognition for many projects and clearing a tough bar raiser interview process.
- Worked as a Domain Tech Lead (DTL) in the Payment Fulfillment Infrastructure (PFI) team that is responsible for the core of money movement operations in PayPal system. As a DTL, I provided technical guidance and direction to about 12 engineers in the “Refund and Reversal” and “Delayed Payments” sub-domains, identifying and implementing quality improvement initiatives. As a DTL, I was to get involved for any feature requests or other significant changes around these sub-domains, designing and documenting solutions, hashing out dependencies among other teams etc.
- In this domain, we are owner of multiple mid-tier services, some on C++ ; some on Java/J2EE using spring, hibernate ; As part of the business or platform requirements, we keep adding new functionalities to these services and occasionally add new component/package as well.
- I had been part of several next-gen projects at PayPal, executing them with excellent quality.
- As a DTL, I evaluated requirements of all projects; worked with product, architects and cross-vertical teams to provide solution for my sub-domain (documenting them in a High Level Design (HLD) document). While engineers implemented the solution, I review their class design, code every week and provide other technical guidance to the team, helping them understand the solution and implement it effectively.
- As a DTL, I identified/proposed quality improvement tasks in my sub-domain and worked with a team to deliver them. Some of the improvements I had done include (1) refactoring the code to make it easily understandable, flexible for extension and unit-testable (2) Adding proper logging information to help with debugging of live issues (3) increasing code coverage through gmock Unit Tests. (4) Gathering metric data for the sub-domain and analysis of it to proactively solve existing issues. These have given great returns in terms of reducing live issues and easy maintenance of the code.
- Worked in following features, designing and delivering solutions end to end.
    - “Cancel Refund” - Needed for a merchant with revenue projections of 2M.
    - Refund VOM initiatives - Addressed few long lasting merchant pain points
    - Touchstone-PLCC and Touchstone-PAP - Key projects for PayPal’s go-offline strategy

- Global Shipping Platform (GSP) - Key initiative from eBay for cross-border transactions
- Touchstone Latency improvements - Reduce time taken to process payments in offline world
- Pay After Delivery - Initiative for peace of mind to buyers and make them use bank as preferred funding method.

Cadence Design Systems India Pvt Ltd, Noida

Senior Member of Technical Staff (Lead Engineer)
July 2006 – Sept 2010

- I have worked as developer for the OA (OpenAccess) based flows in the Encounter digital implementation platform. OpenAccess provides an infrastructure to promote the interoperability of EDA applications and design data.
- Implemented missing functionalities in the OA based flows to enable the smooth working of DMS (Digital-centric Mixed Signal) flow, the latest offering from Cadence for mixed signal chip designing.
    - Worked on a new feature named “On-the-fly abstract generation” which was to enable mixed signal designers import designs in Encounter without having the need for them to create/update abstracts at each and every step.
    - Did several improvements in the existing code for users to be able to perform STA (Static Timing Analysis) on their mixed signal designs.
    - Led a team of two engineers helping them understand the flow and reviewing their code.
- Designed and implemented the current offering of Mixed Signal Design solution based on OpenAccess database (Flow internally known as “Beaujolais”).
    - Designed the solution in collaboration with cross-vertical teams, architects and PMs.
    - Developed the functional spec from the SOC Encounter (a market leader for physical design in digital IC world) side.
    - Implemented the solution with good quality, which enabled the team to receive a Cadence company level (PTO) award for the new solution.
- Improved performance of OpenAccess based save/restore.
    - Analyzed the performance bottlenecks in the OpenAccess based save/restore (called saveOa and restoreOa) as compared to native save/restore in SOC Encounter platform, identified potential areas for improvement and implemented them to improve the performance by 50%.

    - This required rigorous analysis of profiling data and digging into various APIs belonging to other groups, suggesting or implementing new algorithms in those APIs for better performance.
- Implemented a lot of missing functionality in the OpenAccess based save/ restore methods to make them of production quality that can be offered to customers for use.
- Have worked primarily in C++, C and Tcl on UNIX platforms.
- Improved the software quality process by devising new coding standards, new solutions for the regression cycles, efficient code reviews, knowledge sharing etc. Also improved code quality and stability significantly by fixing memory related problems (identified using valgrind) and by increasing the code coverage after analysis of code using gcov.

Mentor Graphics India Pvt. Ltd, Hyderabad

Member of Technical Staff
Sep 2002 – June 2006

- Designed and implemented the BoardStation XE set of products, a new integration of two different proven technologies for PCB designing.
    - Quickly prototyped and demonstrated a small piece of module to prove that an integration of BoardStation and Expedition set of products is possible that will help users design their boards with better productivity.
    - Solved few performance bottlenecks in the module to make sure that the integration works with better performance than the existing solution.
    - Was part of discussions with cross-functional teams regarding the evolution of this integration and implemented several other functionalities to make the integration possible.
    - Developed functional specifications and design documents for the integration.
    - Worked in C++ with STL, MFC on Windows platform.
- Implemented the new architecture of BoardStation-RE interface to make it faster.
    - Replaced the file based data transfer between two products (BoardStation and RE) with a shared memory based data transfer for improved performance. This required adding a complete set of capability in RE for reading data from an in-memory database.
    - Fixed a number of existing bugs to make sure that the data transfer happens reliably without any loss of data.
    - Worked in C++ with STL, C, and MFC on Windows and UNIX platforms.
- Designed and implemented a whole set of new functionalities in the DxDesigner set of products.

- DxDesigner is a front-end schematic entry tool in the PCB flow that was inherited by Mentor from the acquisition of innoveda at that time.
- Was part of a team that implemented a lot of new functionalities to integrate it with other existing back-end design tools from Mentor Graphics.
- Implemented new GUI features in the application for intuitive user interaction and easy integration with other applications used in the flow.
- Developed and owned a new database saving mechanism for seamless integration of DxDesigner with other set of products. This was required to make DxDesigner part of a new Enterprise flow.
- Fixed numerous bugs in the product to make it robust and of sound quality.
- Ported the product and all its related modules to Linux using Mainwin and solved lot of issues arising due to the difference in architecture.
- Worked in C++ with STL, C, MFC, COM, ATL on Windows and UNIX platforms.