# RESUME

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### Objective

I am eager to be associated with a progressive organization that gives scope to update my knowledge and skills in accordance with the latest trends and to be the part of team, which dynamically works towards the growth of the organization**.**

### Professional Experience Summary

* **5** **years** of experience in **Testing on Telecom Billing Domain.**
* **1.2 years** of experience in **Mobile Application Testing.**
* **1.11 years** of experience **in Testing** on **Identity Management, Big Data Platform/Hadoop.**
* **Trained on Cloud Computing Expert level**
* My **roles** and **responsibilities:**
* **Black Box Testing, Regression testing, System Testing, System Integration testing,**

**User Acceptance Testing**

* **Developing Test-plan & Test-cases**
* **Estimation of effort for new projects.**
* **Part of recruitment team for hiring testing resources.**
* **Deployment of rpm builds on Test Servers**
* **Execution of Test Cases**
* **Involved in meeting with Client, Architects & Dev team**
* **Raising & Reporting of Defects on Quality Center, Bugzilla**
* **Creation of XML input messages and Stub drivers**
* **Querying the Oracle, Postgres, Mysql, DB2, Mongo DB and HBase for data**
* **Working on Server side testing, analyzing the logs.**
* Good **debugging and analyzing** skills
* Experience on cloud computing technologies like AWS.(Amazon Web services).
* Experience in deploying Hadoop components and writing Map-Reduce Jobs
* Have sufficient knowledge in: **Hadoop FS, Oracle 9i, DB2, AIX, XML, C, Geneva 5.2, EAI Middle ware, Rabbit MQ,** **L2/L3 protocols,TCP/IP,UDP, Webservices, Cloud Computing.**

### Career History

**01/2013 –till date HCL InfoTech**

Senior Test Lead

**09/2011 – 12/2012 Nokia India Pvt. Ltd**

Senior Test Engineer

**04/2006 – 04/2011 IBM India Pvt Ltd, India**

Senior Test Analyst

### Technical Skills

* Application/Functional Domain: Telecom Billing(OSS/BSS), Mobile Handset Application Testing, Big data
* Functional Testing tool: Win runner 7.0,Rational Functional Tool, QTP
* Load testing tools: Load Runner, RPT(trained)
* Bug Reporting Tool: Test director 5.0,Mercury Quality Center 8.2,Bugzilla
* Database: Oracle 9i, MS-Access, DB2 2.7.2,Postgres 8.4.4,Mysql 5.0.77,JDBC, Mongo DB, HBASE
* Programming language skills: C, Java, Perl, Hive, Pig ,Shell
* GUI Tools: VB 6.0
* Operating Systems: Windows 9x,XP, Unix, Linux, Hadoop FileSystem
* Project Management Tool: RPM ,Accept360,Agile Scrum works
* Billing System: Geneva 5.2
* Middleware: EAI MQ,JBOSS Queue, Rabbit MQ
* Others: Tomcat App Servers, Mainframe, Hyperion, EBPP, Kana Response, Kana IQ, Lotus notes,L2/L3 protocols ,TCP/IP,UDP,SOAP,REST.
* Cloud computing technologies like Azure, AamzonWebServices, HPCloud. Openstack

### Accomplishments

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* Trained to work on Hadoop File system, writing map-reduce jobs in Java.
* On-Training for Cloud computing expert/specialist.
* Certified in Oracle foundation level
* Worked at client location in UK for a period of 1 year
* Brain Bench Certifications in Software Testing, RDMS, UNIX
* Undergone Classroom trainings in RFT & RPT, Winrunner, Loadrunner, Geneva, and Perl.
* Received Awards for the technical expertise in EAI and Geneva
* Worked in Agile software development project.
* Received **IBM India** corporate award for **5 years** commitment and long service.

### Assignment History

## Organization : HCL InfoTech

## Designation : Senior Test Lead

Period **:** Jan’ 13 – till date

**Environment :** Windows XP, Windows 7, UbuntuOS, Sun JDK 1.6.0,MySQL 5.1, Hadoop 2.0,Hive, HBase, Mongo, Solr, Bugzilla 3.6.1, RabbitMQ

## Senior Test Lead – HCL InfoTech (UIDAI Aadhaar, Jan’13 – till date)

The purpose of the UIDAI is to issue a unique identification number (UID) to all Indian residents that is robust enough to eliminate duplicate and fake identities, and can be verified and authenticated in an easy, cost-effective way. The UIDAI's purview will be limited to the issue of unique identification numbers linked to a person's demographic and biometric information.

**Projects worked on in UIDAI Aadhaar**

**1.** **Senior Test Engineer -** UIDAI Aadhaar (ABIS Middleware**, Jan’ 13 –till date**)

The UIDAI makes use of multiple ABIS Vendors to store resident biometric data. Use of multiple ABIS Vendors addresses the need of redundancy and load-balancing.UIDAI Enrollment and Authentication server needs to interact with ABIS Vendors for the purposes of insertion, de-duplication and authentication of resident biometric data.Some of these interactions require that a request be sent to all the ABIS Vendors and some of these interactions require that a request be sent to any one of the ABIS Vendors which is selected based on a pre-configured policy and the responses from the ABIS Vendor(s) are stateless.In order to avoid each component/server develop its own mechanism to orchestrate the above interactions, an ABIS Middleware Server component is envisioned that will abstract the interactions with individual ABIS servers, and provide a uniform view to the applications that depend on ABIS Vendors.

**Role and Responsibilities included**: -

* Performing RCA for issues identified in production.
* Writing Test cases for application under test
* Accessing Hadoop FS and updating the same.
* Setting up of Hadoop cluster of 20 nodes on QA env.
* Querying the Mongo DB.
* Querying the HBASE .
* Involved in meetings with Client, Third party vendors and Technical team
* Analyze System & Functional Specifications.
* Reporting and updating daily status.
* Executing the Test cases on staging server.
* Involved in Integration Testing and UAT Testing
* Providing technical training to newly joined team members and technical/domain knowledge support to the team.

As **Technical Test Lead and Team Lead**, Role and Responsibilities are:

* Involved in analyzing System & Functional Specifications, Use Cases, and Business Requirements.
* Part of recruitment team for hiring resources.
* Identifying Test Requirements, Design Test Cases, Test Scripts, Test Data, Test Plans and execute Test Runs.
* Involved in Peer reviews, Manual Testing, Integration Testing, Functional and Regression Testing, and System Testing.
* Coordinating with the developers for resolution of defects, coordination with TDA, Project managers and developers to understand the requirements for CR.
* Experience in establishing QA Procedures / Standards to meet QA, proficient in writing Test Plans, documenting the Testing Procedures and writing in-depth Test Cases to meet the Testing Cycle.
* Analyzing Risks and Mitigating factors.
* Mentoring and coordination of test team for the successful deliverables on time.
* Participating and resolving the UAT Queries.
* Keep track of the new requirements from the Project.
* Forecast / Estimate the Project future requirements.
* Implementing and evolving appropriate measurements and metrics for testing team.
* Managing and growing Testing assets required for meeting the testing mandate.
* Effectively leading the testing team, Work allocation for offshore testing team as per the new projects.
* Consolidating the status reports on weekly basis for the team, to present to appropriate stakeholders.
* Collating Daily status from team members and reporting the same to Test managers.
* Assigning tasks to individual team members based on skills and task complexity
* Estimation of effort required for new projects.
* Identifying the resources required for specific projects based on skills.

## Organization : Nokia R&D

## Designation : Senior R&D Test Engineer

Period **:** Sep’ 11 – Dec'12

**Environment :** Linux/Windows, Java EE5 – Ejb3.0, JPA/Hibernate 3.X, JBoss 5.X,

JBoss Queue, Mysql 6.1, Postgres 9.0, Tomcat, J2EE, EJB 2.1, JDBC, JSP, Tomcat App Servers, Bugzilla and QC.

## Senior R&D Test Engineer – NOKIA R&D, (Nokia Life, Sep’11 – Dec'12)

Nokia Life is an application from Nokia that runs on selected Nokia mobile handsets. With Nokia Life, you can connect to multiple services in the areas of Agriculture, Education, Healthcare and Entertainment. Some of the services are subscription oriented, where you pay a monthly fee and some are chargeable on a per download/request basis. It enables you get up-to-date, locally relevant information delivered straight to your mobile phone. Nokia's Life (through SMS) is an ideal way to get good local information. It's easy to use and is available in local languages.

**Projects worked on in Nokia R&D**

**1.** **Senior Test Engineer - NOKIA R&D** **India (**Operator Direct Billing for Airtel, Vodafone, Idea, Aircel and Reliance operators**,** Billing Optimizations **Jun’ 12 –Nov'12**)

Direct Billing Integration is a process of Billing Integration with different Operator to the Existing NLT system . Billing process for all operator Clients in functionalities of Subscription Activtation, Deactivation and Renewal is communicated to Operator Subscription Engine.

Operator recognition is done based on the MCC & MNC codes.

Once User sends a request for Subscription Activtation/Deactivation , NL server sends the same request to Operator Billing gateway via Billing Adaptor for Charging. Based on the response code received by operator the User is sent a welcome/cancellation message appropriately.

In case of Renewal, Operator sends a renewal request to NL server which in turn sends a message to user informing the service continuation.

**2.** **Senior Test Engineer - NOKIA R&D** **India (**Main Code Level Testing India 1.x server & MSG Billing PCR’s Operator Billing**, Jan’ 12 –Jun'12**)

As part of MCL, a main build involving all the major projects released till date along with production defects and defects raised during testing are collated and released as one common build. This build becomes the base build for India and other countries that use the Nokia life service for ex: China, Indonesia & Nigeria.

This build is tested and verified for it to be eligible to be deployed on production servers. Testing involves verification for correctness of all the pervious PCR’s and defects. Extensive Regression testing is done and then released for further testing.

As part of MSG (Micro Subscription Gateway) Billing, Vodafone and Idea Vendors Operator Billing System are to be integrated to Nokia Life Billing Sub manager. The services which are offered by Nokia Life are to be billed directly by the Vendor Billing system and the same was to be updated on Nokia Life servers.

The Billing Sub manager needs to be remodeled to handle all the different error codes sent by operators.

The User is charged as per the Billing Cycle and initial subscription payment agreement between the operator and Nokia Life.

**3.** **Senior** **Test Engineer - NOKIA R&D** **India (**PCR 181,190 &191 **Oct’ 11 – Dec ‘11**)

As part of PCR 181, Billing reports to operators and content providers which were inaccurate were fixed to ease the issues faced .Billing Price and Billing Interval for every billing or renewal transaction were logged in CCLOG. Billing event for Subscription or for RO was fixed to pass correct billing events. Premium SMS transactions (”First Ping”) need to be captured in cc db. CCLOG parsing was fixed to read the new information and store it in Transaction table.

As part of PCR 190, NL Server needed to generate BILLING\_RO or BILLING\_RT transactions for all the RO and RT request irrespective of the operator.

As part of PCR 191, NL Back End needs to capture Premium SMS Transaction and generate appropriate CCLOG for this. New Transaction Type to be assigned for this event in CCDB as PREMIUM\_SMS\_TRANSACTION.

**Role and Responsibilities included**: -

* Writing Test cases for application under test
* Deployments of Builds on R&D test Servers.
* Analyze System & Functional Specifications.
* Reporting and updating daily status.
* Attending daily scrum meetings and giving inputs regarding tasks completed
* Attending workshops and trainings related to project
* Execution of Test Cases.
* Updating the Agile Scrum works task.
* Estimating the time required for new Projects.
* Executing the Testcases on Staging server.
* Supporting the OPS team in resolving the Release issues, production issues.
* Flashing Nokia Devices with latest firmware.
* Slide loading of Nokia Life latest version on different devices.
* Attending design review meetings with Internal team.
* Attending meetings with Operator to confirm the Billing requirements.
* Mentoring new team members and guiding teammates.

## Organization : IBM India Pvt Ltd

## Designation : Senior Test Analyst

Period **:** Apr’ 06 – Apr’ 11

## Environment : AIX 5.1, EAI, DB2, Oracle, Web logic, Geneva 5.2, Kana (CRM), J2EE,

## EJB 2.1, JDBC, JSP, Web sphere App Servers, Toad, eaSuite from eDocs, Unix, Web sphere MQ 5.3, Quality Centre, Windows 2000/XP

**Test Engineer - Client** –Telfonica O2, United Kingdom **(**MMO2 System Test**,** **Oct’ 06 – Apr’ 11**)

O2 - leading provider of mobile communications services with 100% ownership of mobile network operators in three countries – the UK, Germany and Ireland. In UK alone have around 16 million subscribers. The Companion program aims to create a strategic architecture to support the current and future business needs in UK. The aim of the project was to replace the disparate Legacy systems with a unified architecture, which was more flexible and powerful to handle the volatile nature of the Telecom business. The move to a new architecture involved-

* Design, development and test of the new systems
* Migration of customers and data from the existing systems
* Hosting of the new environment
* Application Maintenance and Support

IBM has taken the ownership of the customer care applications that serve the businesses. The customer care applications manage the workflow for the provisioning process of the services that are offered. Typically, the process would begin with a service request from the customer for a particular service, which is treated as an order. The order data is passed on to the Billing and provisioning systems. The Billing system takes care of the credit validation and such things while the Provisioning application takes care of configuring the service on the network.

**Major Projects worked on in Telfonica O2, United Kingdom**

**1.** **Test Engineer - Client** – Telfonica O2, UK **(**Quarterly Tariff Refresh & BOSC’s**,** **Oc**t**’ 06 –Sep’ 09**)

O2 being a mobile phone service provider in UK, tariffs and allowances are refreshed on a quarterly basis to prevent churn of customers and to being competitive in the market with the least possible disruption to the existing customer base. It was the team’s responsibility to understand the often times vague requirements of the customer and changes to the existing product catalogue. Also the team is involved in understanding the Base products/services that is available in various sales Channels and to the CareX agents, and compatibility between the base products and services and mappings between the base products/Services with appropriate Billing tariffs and Rating tariffs (for different event types).

New tariffs and value added services (VAS) introduced needs extensive testing on components such as order placements channels/shops, EAI, Provisiong system, Geneva system and bill presentment systems (EBPP/RRD). As part of 'quarterly' test execution activities, I have been part of the SIT team, where extensive static and dynamic tests were conducted on Geneva billing and rating components (configurations), EAI middleware to verify installed orders through various order placements channels (Online & Offline). Static test were conducted on the Tariff Mapping tool.

**2.** **Test Engineer - Client** – Telfonica O2, UK **(**SOS Load**, Jan’ 07 –Apr’ 09**)

As part of SOS data load, new Retailer Id and Source of Sale values are loaded every week and made available in the O2 shops. As this involved a lot of repeated manual intervention, the SOS load testing was automated.

It was decided to use QTP as the automation tool to automate the process of validating the new SOS data load, as the client was not interested in accommodating this in the budget we chose RFT as the automation tool for the same.

As part of SOS load testing using RFT .Automated script was created using the record feature of RFT. The automated script uses a standard set of functions these include:

* Reading the data from an input spreadsheet.
* Creating a report spreadsheet from a template.
* Saving the report and associated screenshots in a time stamped directory.
* Emailing the report out to a specified email address.
* A batch file, which is used to submit the test (prefixed “Playback\_”).

**3. Test Engineer - Client** – Telfonica O2, UK **(**Contingent RFE Gateway Solution**, July’ 10**)

The requirement of this change was to replay the suspended order and progress through the order capture process, without the need for re-keying information. To achieve this, the order will be restored to the first step of the order capture process.

Scrum, an agile process was followed for this CR where Analysis, Design, Coding and Testing were done in a series of sprints with a Time boxed approach. There was Scrum master who used to handle the everyday activities. Extreme programming approach was followed where development team used to deploy the code for a group of requirements in different phases and the test team tested deployed code iteratively. Defects raised as part of testing activity was fixed by the development team and a new build was given for test. Time allocated for different phases is as below:

Analysis and Design: 1st & 2nd day

Coding & Testing: 3rd, 4th day

System Testing: 5th day

Once all the defects were fixed and test team confirmed that the code was stable, a full regression of the code was done on the last day. At the end of the 5th day, prototype developed was demonstrated to the client.

**Role and Responsibilities included**: -

As **Test Analyst** for E2E functionality testing of the telecom systems, Role and Responsibilities are:

* Played a key role in several BOSC, MOSC (Quarterly tariff refresh) and Capability CR’s.
* As a part of AMS group, was involved in testing of new changes and enhancements in the production system, which comprises a mini-development life cycle.
* Was involved in developing Test Cases for Change Requests and Operational Support Changes, data analysis and Coordination with client for the Projects worked on.
* Involved in review of Delta Specification, Test Cases, Test Execution and several Defect impact assessments.
* Reported defects using Quality center. Review of Quality Gates for CR’s (Unit test review).
* Responsible for conducting Knowledge Sharing sessions for the offshore team on AMS applications.
* Testing of middleware based solution involving COTS (Commercial off the Shelf) packages covering Billing, Customer Care, Product sales and Service Provisioning for Telecom service provider.
* Provided technical training to newly joined team members and technical/domain knowledge support to the team.
* Testing of Operation Data source, Hyperion reports, CRM applications like Kana, Carex
* Involved in creation of Test Stub drivers to test third party applications.
* Creation of automation script using the record and playback feature of RFT.

**Projects worked on in AT&T, United States**

**1. Test Engineer - Client** –AT&T, United States **(**Service Provisioning Platform**,** **May’ 06 –Sep’ 06**)

Service Provisioning platform is a family of applications, which is responsible for provisioning Layer 4 to Layer 7 features for all AT&T Voice and Enhanced services. It is responsible for service activation and network infrastructure provisioning for both the TDM and VoIP networks. Functions include Order provisioning request receipt, Assign, Assembly of provisioning requests, configure logical network resources, logical provisioning data management and provisioning request management.

All SPP functions are available through published Web-based services. SPP has the capability to receive and process-provisioning requests ranging from single service orders to a complete sales business solution or network project. SPP supports provisioning request data input capability for customer service orders, network and e-Servicing driven provisioning requests.

**2. Test Engineer - Client** –AT&T, United States (P9701-VoIP PRI to SS7 Conversion)

P9701 introduces SS7 TGS between the CVOIP GSX and the 4ESS and provides additional automation for the SS7 TG provisioning process. The feature will modify CVOIP and BVOIP routing to use the new SS7 TGs.

**3. Test Engineer - Client** –AT&T (P9438-BVoIP Customer Site with VoIP option=’IP\_TOLL\_FREE’)

IP Toll Free is a BVoIP inbound service with the ability to terminate to VoIP endpoints via MIS (PNT) services. The primary change for IPTF MACDs is the staging of multiple provisioning orders (add, change, delete) from GIOM, with SPP acting solely on the appropriate order components at the required time. This allows users to provision “customer-impacting” activities (i.e. Change and Deletes of active IPTF RICs) separate from “non-customer impacting” provisioning activities (i.e. Adds of new IPTF RICs).

**Responsibilities included: -**

* Performed Functional Testing.
* Execution of Test cases.
* Involved in regression testing.
* Creating and maintaining the defects using defect-tracking tool.

### Education and Background

* **B.E (Computer Science & Engineering),** from Vijayanagar Engineering College, Vishveshwariah Technological University (Belgaum).

### Strengths

* Ambitious, easily approachable, analytically skilled, team player & Adaptable nature.

### Personal Details

Name **:** Maheswari Rajendran

Father’s Name **:** Rajendran. S

Date of Birth **:** 14th September

Gender **:** Female

Marital Status **:** Single

Passport Number **:** G5077068

Languages Known **:** English, Hindi, Kannada, Tamil, and Telugu.