Jayakumar Naryananan

**Mobile:** 09731859101 - E-Mail: [winjkg@gmail.com / win\_jk@hotmail.com](mailto:winjkg@gmail.com%20/%20%20win_jk@hotmail.com)/

[in.linkedin.com/in/jayakumarnarayanan1/](http://in.linkedin.com/in/jayakumarnarayanan1/)

### Experienced Testing Professional |Certified TestCase DesignerQAI GLOBAL|

## *OBJECTIVE*

Looking for a senior testing position to lead the complete testing team and growth opportunity and explore new technologies

## *PROFESSIONAL OVERVIEW SUMMARY*

* Seasoned Professional with 11+ yrs. core expertise and Successful Test Management
* Handling a large team of about 25 engineers.
* Good Understanding of Testing Methodologies ,SDLC ,Test Plan , Design, Review and Maintain Complex Test Automation Framework (Data Driven, Keyword)
* Good exposure in Testing practices with Telecom, Wireless domain, Embedded, Mobile, Application software
* Managing day-to-day decisions of project Test teams, including bug priorities, Work assignments and work sequencing.
* Hands-On Team Leader with strong focus on Documentation, Communication ,Process improvements
* Single point of contact for test requirements with clients in UK, Japan, Korea and Taiwan locations.
* Shown Flexibility ,Quick Learner ,Proactive attitude and amazing team player
* Highly efficient in V-Model, Prototype, Dynamic, Onshore-Offshore project environments
* Developing and monitoring projects plans based on assessment of team members skills and priority of deliverables
* Proficient in Detail oriented Test Estimation, Test Coverage, Test Traceability Matrix, Software Metric collection and report generation, Evaluation of testing tools and finalize, Test monitoring, Optimization of available Resource, User Acceptance Test (UAT) creation and review.
* Exposure in Risk identification and providing possible Mitigation, Contingency plan and Risk monitoring, controlling across Software Testing Project.
* Proven Success in Multi-tasking, handling multiple projects and responsibilities.
* Extensively worked with Developers and Business Analyst to validate the application functionalities
* Review and Approval of Product Manuals & Test Artifacts

## *ORGANISATIONAL EXPERIENCE*

Since Jun'12:Tata Elxsi Limited, Bangalore, India, as **Test Project Consultant** at

**Client Site - Sony** India Software Development Center

Apr’08-May’12: SPA Computers India Pvt. Ltd., Bangalore

As **Project Manager (QA-Testing)**

Feb’07- Mar’08:**Tata Elxsi Limited**, Chennai, India, - **As Senior Engineer**

Jun’05- Jan’07: Airbee Wireless Pvt Ltd, as test Engineer

Jul’04- May’05: Fingertip Technologies Pvt. Ltd, Sanmar Group, Chennai

– As Test Engineer

Feb’03 – June’04: Wireless Embedded Solution and Technologies Pvt. Ltd, Chennai

- As Test Engineer

## *ROLES AND RESPONSIBILITES*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Year** | **Designation** | **Roles and Responsibilities** | **Acquired Knowledge** |
| **Tata Elxsi Limited** | Jun'12 -Till Date | **Test Consultant** | 1.Complete Sony VITA Game Developer  Tool Test Management 2.Complete Sony PS4 Game Developer  Tools Test Management 3. Test Bridge Engineer for UK - Sony 4.Test Bridge Engineer for Japan Sony 5.Release Management 6.Test Environment Management 7.Task Allocation 8.Defect Management. 9. Arranging Client Demo and UAT Plan 10. Maintain Traceability Matrix 11.Bugzilla and SVN Account Maintenance | 1. Automation using VB Script /Python 2. Test Analysis  3.Regrssion Test Suit 4.Bug impact Analysis 5.Handle Multiple Project in parallel. 6.Define and utilize metrics and reports to communicate the product quality. |
| **SPA Computers India Pvt. Ltd** | Jun’10 -May '12 | **Project Manager  (QA-Testing)** | 1.Requirement Gathering. 2. Point of contact for test requirement. 3.Marketing Testing Service. 3.Review and Approving Traceability  Matrix for Test projects 3.Test Resource Management 4.Recuritment 5.Hardware Procurement 6.Conducting Demo of innovation embedded product 7.System End to End integration testing 8.Project Deployment at Client site 9.CMMI Process owner  10.Work closely with architects, developers, and performance engineering to ensure performance measurements for products are being addressed in a timely fashion. | 1.Proficient in defining testing methodologies. 2.Designing Test plan 3.Defect management. 4.Expertise in designing 5.Automation framework 6..Complete Product Development Cycle exposure |
| **SPA Computers India Pvt. Ltd** | Apr’08 – May’10 | **Test Lead** | 1. Test Case Review and Approval. 2. UAT Execution 3.Traciablility Matrix Preparation 4.Hardware Testing | 1. GPS Based Product Testing 2.Etherwan Network Switch Testing 3. Multi-lingual Testing  4.Certified Test Case Designer from QAI GLOBAL |
| **Tata Elxsi Limited** | Feb’07- Mar’08: | **Senior Engineer** | 1. Wireless packet capture device testing -Sniffer 2.WIMAX protocol Tester | 1.Test Planning 2. WIMAX Protocol 3.Defect Management |
| **Airbee Wireless Pvt Ltd** | Jun’05- Jan’07 | **Test Engineer** | 1. Zigbee Wireless- MAC Layer Tester 2.Zigbee Wireless - NWK Layer. 3.Embedded device sensor tester based on Zigbee protocol 4.Zigbee Protocols Trainer - MAC and Network layer | 1.Knowledge of Zigbee Stack 2.Test Planning 3.Defect Logging Reporting for the module. 4.CMMI Process Training 5. Personality Development Training |
| **Fingertip Technologies Pvt. Ltd** | Jul’04- May’05 | **Test Engineer** | 1. Wireless MAC Protocol Tester | 1. Zigbee protocol 2.Test Case Creation |
| **Wireless Embedded Solution  and Technologies Pvt. Ltd - Sanmar Group** | Feb’03 – June’04 | **Trainee - Software Engineer** | 1. Microcontrollers Programmer | 1.Programming of  Atmel Board |

## *PROFESSIONAL EXPERTISE TECHNICAL SKILLS*

|  |  |
| --- | --- |
| Scripting Languages | Python , VB script |
| Operating Systems | Windows, LINUX ( Basic Commands), MAC OS |
| Automated Tool | QTP , Sikuli |
| Data Base | MySQL |
| Coding Language | C, Java |
| IDE | Montavista Dev Rocket, Code composer studio (CCS) |
| Wireless protocol: | Zigbee -IEEE 802.15.4, WIMAX (Base Station) -IEEE 802.16,UMTS, Base Station,RNC |
| NWK Testing Tool | Chipcon’s packet sniffer, Colasoft, Wireshark, Ethereal |
| Bug Tracking Tool | Bugzilla, Test Director, Quality Center, QA Monitor |
| Project Tracknig Tool | Serana Open proj |
| Configuration Management  Tools/Other tools | Tortoise SVN, Capture Play Back tool, Source Insight-3.5 Hex Editor |

**FUNCTIONAL**

* Managing multiple .Net and VC++ projects. Training arrangement for customers
* Organizing embedded product demo in software conference
* Engineering UI & Test cases Design.
* Understanding functional requirement document.
* Test Scenario Review & Approval [Functional, Usability, Compatibility & Regression, UAC, and Pilot testing]
* **Defect tracking** during System and Acceptance testing till closure.
* Review and close defects using bug tracking tool.
* Designing memory leak testing and review on reports and consolidate it to director.
* Interacting with other Team Member, Developers and Client to understand the feature better.

*Key Projects Accomplished*

* Automation of Target Manager Server Mar 2014 - Till Date

**Scripting Language:** Python

**Client :** Internal

**Synopsis:**

This project involves verification and validation of the Sony’s proprietary tools that are used by the Game developers to develop the games, verification and validation of the libraries provided for Sony’s Next Generation Gaming Product (API Test Design and Test development in C) and QA for SDK.

The TMS is the one of the proprietary tool used by the Sony’s Play Stations. The target manager server is a tool to carry communication between the target i.e play station and the host PC. This tool completely based on user input commands. This tool is used to set the various properties to the target. This tool is also used to launch and manage the small application used by the target.

The tool having more than 200 commands and it will take more time for manual execution and

Designed the Data Driven Automation Framework and considerably reduced the test execution time.

Key Responsibilities:

* Design the Data Driven Automation Framework.
* Test the script with positive and negative test cases.
* Maintenance
* Next Generation PlayStation (NGP) Sony PS4/VITA Jul 2012 - Till Date

**Application:** Software Testing / Quality Assurance **SONY's PlayStation**

**[VITA/PS3/PS4] Platform**

**Scripting Language:** VB Script, Python, Sikulli,

**Issue Tracing**: Bugzilla 3.4.12 issue Tracker, Anvita

**Client:** Sony India Software Development center, Bangalore

<http://www.sony.com> - <https://scedev.net/>

**Team Size**: Over 20 members including 2 Dev, 17 testers and 1 Test Assistant

**Product Info:** <http://in.playstation.com/ps4/>

**Synopsis**:

This project is aimed at testing the SDK of PS-Vita / PS4 SONY’s PlayStation. The main purpose of the project is to test all functionality of different modules of PS-Vita/ PS4 system. Testing involves the Tools/GUI testing.

Key Responsibilities:

* Test Bed Gathering and Environment Setup
* Preparing Software Test Plan for the Assigned Module
* Preparing the Test Scenarios
* Design support for the Automation Activities
* Automate and Maintaining Test Scenario and reduce reasonably test execution time
* Managing client Testing Requirement
* Managing Test Platform for different SQA
* Review and Approval of Test Cases
* Quick set-up ,execution and reporting of finding for SMOKE TEST for each build
* Conducting Weekly Team Meeting

Following feature - Phase 1

* SDK Manager Module
* Sample Browser Application Module
* Screen Capture Application Module
* Pad Control Capture Application Module
* Merit Trac –Biometric Device Mar’11 – Jun’12

**Embedded Application:** Biometric Device Complete product Testing (Full cycle)

**Tools:** PHP, Bugzilla 3.4.10, Issue Tracker

**Client:** Merit Trac - Bangalore

<http://www.merittrac.com/>

Team Size: 30 including 4 Dev, 24 testers, 2 DB support

**Synopsis:**

MeritTrac provides solution to address the candidate authentication using Biometric Device. The device can be moved from one class room to another class room to capture the finger print and photo of the candidate. Meritrac Application acts as interface between the device and server to upload and download the data in to the device.

**Key Responsibilities:**

* Gathering the Requirement from the client and mapped with Traceability matrix
* Preparing Software Test Plan for the both Hardware / Software
* Designed Hardware / Software / Database Test Scenario
* Designed Client / Server application to configure the device
* Conducting Pilot Testing Demo for the Client
* Design support / Guidance for the Automation Activities
* Managing client Testing Requirement
* Review and Approval of Test Cases
* Training provided to the Client regarding Device and Software implant
* Designed User Manual / Trouble Shooting documents for the Biometric product
* Recruitment of Testing Professional

**Following feature – Phase 1**

* Super Admin Module
* Biometric device testing – Display, Finger print Authentication, Photo Capturing
* Application Testing – Adding of new device, Mapping of device to class room
* Pre Test Module
* Post Test Module
* Pre counseling Module
* Post Counseling Module
* Battery Management Module
* Report Generation Module
* Fleet Management System May ’10 – Jun’12

**Embedded Application:** GPRS Tracker device

Tools: Bugzilla 2.2 issue Tracker, SVN 1.5

Client: JAYPEE GROUPS.

Platform: Tracker project

Team Size: 8

**Synopsis:**

InCarz Fleet provides Road transport companies with a comprehensive, integrated suite of functions and services to address the end-to-end transportation problems from vehicle dispatch through logistics management.

InCarz fleet is an ultimate tool for Tracking, Real-Time Monitoring and MIS Reporting for an efficient Fleet Management.

The combination of GPS & GPRS / GSM Technology in the VTU (Vehicle Tracking Unit) and Online Fleet Application provides:

* User-friendly Web Interface that allows real-time tracking and positioning of vehicles
* Real time alerts based on predefined thresholds viz route deviation, over-speeding, non-conformance to stops
* Customizable reports using Web portal
* Cell Broad Cast System May ’10 – Dec’10

**Telecom Application:** Cell Broadcast short message service

Tools: Bugzilla 2.2 issue Tracker, SVN 1.5

Client: Omnitel – Korea <http://www.omnitel.lt/>

Platform: Telecommunication Project, Linux

**Synopsis:**

The Cell Broadcast short message service (CBS) for GSM and UMTS. The CBS service is analogous to the Teletex service offered on television, in that like Teletex, it permits a number of unacknowledged general CBS messages to be broadcast to all receivers within a particular region. CBS messages are broadcast to defined geographical areas known as cell broadcast areas. These areas may comprise of one or more cells, or may comprise the entire PLMN. CBS messages are broadcast cyclically by the cell at a frequency and for a duration agreed with the information provider.

.

* QOS –Filtering 802.1x protocols on Ethernet Switch Apr ’10 – Nov’10

**Network Switch Application:** Ethernet Switch

Client: EtherWAN (Taiwan) <http://www.etherwan.com/>

**Synopsis:**

Test Design and Execution of QOS functionalities for the switch

**DHCP**: Configuration of VLAN,PORT,IP setting for the EX77604 EtherWAN switch using web browser Getting the DHCP IP for the client from DHCP server running in Linux machine Graphical User Interface Testing for the DHCP Module in Web Interface

**SNMP:** Verifying the default value of EtherWAN switch IP, System Name, LLDP Details, TX Interval, Hold Time multiplier via SNMP Manager Altering the value of System Name , TX Interval, Hold Time multiplier through the SNMP manager and verifying the same in the EtherWAN switch web browser Altering the value of System Name, TX Interval, Hold Time multiplier through the EtherWAN switch Web Browser manager and verifying the same in the SNMP manager Incrementing the default value of switch TX Interval, Hold Time multiplier via script in Linux system connect to EtherWAN switch and verifying the same in Web Browser. “Disabling LLDP “features verified Graphical User Interface Testing for the SNMP Module in Web Interface.

**IGMP:** IGMP V1 Passive. From router send Membership Querry V1 or V3 packet to switch.Host system got MembershipQuerry V2 general pkt, from host send Membership report V1 pkt, then the host successfully added in the group 224.0.1.60

IGMP V1 Qurrier mode, from router send Membership Querry V1 or V3 packet to switch Host system got MembershipQuerry V2 general pkt continuously, from host send Membership report V1 pkt, and then the host successfully added in the group 224.0.1.60

* Yanco Price verifier Apr ’10 – Nov’10

Platform: Montavista Linux on VT8430 Hardware, Linux, Windows XP, Bugzilla, Manual Testing

Client: Yanco, Taiwan http://www.yanco.com.tw/

* Network Digital Signage Player/Price Verifier Nov ’09 – Mar’10

Platform: uClinux on Sigma Design, Linux, Windows XP / 2000, Bugzilla, Manual Testing

Client: iEi Corporation, Taiwan http://www.ieiworld.com/

* GPS Tracking System Jan ’10 – Dec ‘10

Platform: Bugzilla, Manual Testing

Client: GlobalSat Technology Corp, Taiwan [<http://www.globalsat.com.tw>](http://www.mdd-creative.com/)

**Synopsis:**

GPS Tracking System is a customized application designed and developed for GlobalSat Technology Corp, Taiwan for various GPS compatible products variances like, Data Logger(DG 100) Bluetooth Data Logger (BT 335), GH Watch (GH 615M and GH 625M) , and a Personal Tracker (TR 100 and TR 101). These Products are tested on three OS Platforms such as Windows XP/2000/VISTA.This project will work on .Net 3.5 Frameworks (implemented WPF and WCF).

This application enables user to connect various GPS instruments to download and process the data in terms of Track Records, Way Points. The application is designed in such way to train, guide and monitor various out door activities like fleet monitoring, Sports activities and personal security for children and inform people.

* Human Machine Interface – Industrial Automation Apr’08 – Dec’09

Platform: Win XP, WinCE

Client: ICP Electronics Inc, Taiwan [http://www.icpems.com](http://www.icpems.com/)

**Synopsis:**

IEIHMI is a product for IEI Technology Corp, Taiwan which is being developed at SPA Computers. This product promises to be a solution for most of the industrial automation segments. This product comprises of an IDE from where a user can frame the projects, design the screens in accordance with the industrial plants and hence configuring various settings for communication protocols (OPC Compliance) and then on deploying it onto the WINCE device which in turn is programmed to host a list of services and also connected to various

**PLCs such as Omron TCP/Serial,Allen Bradley, KoyoEthernetTCP/Serial, Melsec TCP/**Serial, CAN Open.

* Packet Sniffer Development July’07 – Feb ’08

Platform: Linux FC V4

Client: Internal R&D

Protocol **Zigbee protocol**

Team Size: 3

**Synopsis:** Development of packet sniffer application which capture the packet in air and display in the application as MAC layer packet, NWK layer packet.

* BSMAC System Testing Feb ‘07 – July’07

Platform: Linux FC V4

Client: Internal R&D

Protocol **WIMAX**

Team Size: 3

**Synopsis:** Testing Basic functionalities Ranging, SBC, Registration, Creation of Service Flow. Data Transmission and Deregistration after porting in the VX Works environment.

* AIRBEE ZIgbee ZNMC Testing- NWK Layer/ AIRBEE ZIgbee ZMAC Testing un’05 — Jan’07

Platform: Embedded Atmel Boards

Client: Airbee Wireless (P) Ltd.http://www.airbeewireless.com/

**Synopsis:**

ZigBee is a specification for a suite of high level communication protocols using small,

Low-power digital radios based on an IEEE802.15. .4 For personal area network. Applications include wireless light switches, electrical meters with in-home-displays, and other consumer and industrial equipment that require short-range wireless transfer of data at relatively low rates.

ZNC is a complaint to Zigbee platform and the basic functionalities includes testing of Network layer Data Routing, Data Broadcasting based on Rangy, Kempt and Bushy topology.

## *ACADEMIC OVERVIEW*

* MCA (Master of Computer Application) from Chennai University
* B.sc (Physics) – The New College Chennai

## *PERSONAL DETAILS*

Date of Birth: 9th Mar 1975

Present Address: No 65, Mahadevapura Main Road

Mahadevapura

Mahadevapura post,

Bangalore-600048

References:

Available on request