

CAREER PROFILE

- Working as Senior Engineer in **Life's Good (LG Soft India) PVT Ltd**, Bangalore from Nov 2020.
- Worked as Senior Consultant in **Infosys Ltd**, Bangalore from March 2017.
- Worked as Senior Software Engineer – QA in **ARRIS group Inc. Pvt Ltd- Motorola Mobility**, Bangalore from April 2014.
- Worked as Software Engineer - QA in **CISCO Video Technologies Pvt. Ltd** client of Volen Software system Bangalore from September 2013.
- Worked as Associate Engineer - QA in **Sure Soft System Pvt. Ltd**, Pondicherry from May 2010.

EXPERIENCE SUMMARY

- 10.9+ Years of hands-on experience in Manual and Automation testing (**Media, STB, DTV, IPTV, OTT, ABR, HLS, Android,DVR**) and Test procedure creation.

AREAS OF EXPERTISE

- Experience in testing the Mobile app for Audio & Video streaming, ABS-HLS, OTT, MPEG-DASH, Browsing functionality.
- Good knowledge in parsing and analyzing the DVB - PSI/SI tables and sections & ATSC standards.
- Tested the NVOD, T-VOD, S-VOD and Push & Pull VOD functionalities like playback, Performance.
- Good Knowledge in DVR functionalities like Time shift recording, Single recording, Dual recording
- Good knowledge in DVB-T/T2, DVB-S/S2(C/KU bands) and DVB-C.
- Expertise in Manual Testing of Android Mobile applications.
- Experience in Sanity, Functional, Regression, User Interface, Performance, Stability and Stress testing.
- Generate and analyze the Video and Audio quality using Quantum Data 882E and 780B.
- Good Knowledge in DVR functionalities like Time shift recording, Single recording, Dual recording.
- Expertise in TV features like HDMI CEC, 3D (Side by Side, Top and Bottom, Frame Packing), Factory command, Factory menu, Video and audio fine tuning and other TV functional features.
- Tested the web browser application functionality like loading, navigation performance & rendering using the browser benchmark with Sun spider and Facebook, Twitter, Mail, Map and YouTube and internet radio.
- Good knowledge and well experienced in DTG (UK, TVNZ) – SD & HD MHEG testing, IC, ICS, DTG (UK) – SD & HD Linear testing.
- Good Testing Knowledge in STB Navigation layer control flow of STB, Teletext feature and HBB TV.
- Hands on experience in writing test specification & deriving test cases according to requirement specification.

TOOLS AND EQUIPMENTS USED

- eTSanalyser for Transport stream analyzing (Proprietary Tool), Python, Robert Framework
- Streamer/Modulator – DekTec, Altronica, Teleview(TPG), Stream Valve and Scientific Atlanta.
- Motorola Headend tools – DAC and CMTS.
- Defect tracking – JIRA, Mantis and Bugzilla
- Log analyzer – Teraterm, Kibana, Charles.Equipment used – Fluke, Chroma and Quantum Data Signal Analyser & Generator (For Audio, Video, EDID and HDCP analyzing) and DD+ Audio decoders.

PROJECT EXPOSURES (in reverse chronology):

Project #1 : LIFE'S GOOD / End to End TV testing

Product : LIFE'S GOOD /webOS / Smart TV/ VOD/ nDVR

Customer : LIFE'S GOOD, Korea.

Description:

Cloud DVR – Review Buffer – VOD – Interactive Applications – HTTP based code download – Client interfaces (Ethernet / WIFI) – Replay TV – VSPP – SMART TV App – YouTube – Netflix – LG channel.

Roles and Responsibility:

- Prepared & validated test cases for new features like Room To Room, Home Dashboard AD insertion, AD Banner, LG channel OTT streaming, HDR and Smart TV apps.
- Validated the Full Functional TV Features (OTT, Media Streaming, Interactive Applications & VSPP recording, Netflix), HDMI, HDCP and Non functional testing.
- Following the Agile Development process and responsible for End to End testing of LG new product line up integrated with new features and MR releases for launched TVs.
- Preparing daily workloads for staff & coordinating the daily allocation of work including myself.
- Involved in Test plan, Test strategy preparation based on Product Road Map (PRM) for all LG TV's.
- Monitoring & reporting on standards & performance targets.
- Automating the System Integration test cases using python (Selenium)

Project #2 : LIBERTY GLOBAL/ Horizon GO / OTT Validation

Product : LIBERTY GLOBAL OTT Platform/RDK – V / nDVR

Customer : LIBERTY GLOBAL - Amsterdam.

Roles and Responsibility:

- Tested OTT feature in Horizon Go Mobile app for Audio & Video streaming, ABS, HLS, OTT, MPEG-DASH, Browsing functionality.
- Involved in initial Requirement Analysis phase and understanding user stories defined in Jira.
- Responsibilities include creation of test suites, creation of test cases, test case execution, defect logging, defect retesting, regression testing, staging testing and production testing.
- Tested the T-VOD, S-VOD, Push & Pull VOD functions.
- Written test cases in Gherkin language as per customer requirement. Delivered the test cases to client.
- Worked in RDK-V module testing & RDK – TDK testing.

Project #3 : COMCAST / Requirement analysis and functional testing

Product : COMCAST VIDEO MEDIA SERVER & CLIENT/RDK – V

Customer : COMCAST, US.

Description:

DOCSIS – Local DVR – VOD – Client interfaces (Ethernet / Moca / WIFI) – TV Apps – YouTube – Netflix

Roles and Responsibility:

- Understanding the functionalities of video encoder/transcoder, MPEG Compression mechanism, and transport stream packets (PES, TS), ATSC standards and PSI table standards.
- Developed and Tested CC standards and Video, AFD and EAS.
- Tested the Android app with live streaming, S&G file creation, Recorded content playback functions.
- Involved in the discussions with client along with onsite team regarding requirement analysis and derived test cases based on requirement.

Project #4 : HITOP/ Infotainment Tuner testing
Product : HITOP/ST7105/DVB-T/DAB/DMB/ CI+PVR
Customer : HITOP – TAIWAN, KOREA

Description:

DVB-T – DAB – DMB - CI+PVR - Mobile application. - Dual antennae - Multi region support

Roles and Responsibility:

- Tested all the PVR functionalities.
- Validated Infotainment tuner testing -FM, AM, DAB and DMB testing
- Validated MFN feature, CI Testing & Bluetooth.
- Validating overall functionality and Delivering quality product to customer.

Project #5 : TESCO/ Certification testing and functional testing

Product : TESCO/DVB-T2/FTA/MHEG5/TROVE/UK FREEVIEW HD+ :
Customer : TESCO – UK

Description:

DVB-T2 – FTA - MHEG5 – TROVE - UK FREEVIEW HD+ -Dual tuner- MPEG4HD – PVR.

Roles and Responsibility:

- Validated & certified the MHEG test cases according to the DTG UK SD-MHEG & HD MHEG (D-Book 6.2.1) profile spec.
- Tested basic FTA functions (Tuning, AV decoding, Subtitle, EPG functions)
- Validated full PVR features [Dual recording, Recording playback, Event Timer recording, Subtitle & Multi audio recording]
- Validated tuner features like BSF (Best Service Function), MFN (Multi Frequency Network), Tuner conflicts.
- Tested the OTA functionality (SSU, ESSU).

Project #6 : VIDEOCON/PHILIPS/SANSUI/ End to End Smart TV testing

Product : iDTV/ DVB-S2/Linux / 3D / SMART TV
Customer : Videocon/Philips/Sansui - India

Description:

DVB-S2 – iDTV - Analogue TV - 3D - SMART TV - Web Browser -YouTube – Applications.

Roles and Responsibility:

- Validated the 3D Features SidebySide, Topbottom, Frame packing and 2D to 3D conversions.
- Internet Features like Web Browser, YouTube lean back V4 Playback & Android applications.
- Video, Audio, Photo Playback via USB Devices, UPnP with only Digital Media Player (DMP) and file sharing
- Tested all the external inputs (HDMI, CVBS, COMP and PC) using FLUKE and CHROMA generator.
- Tested the basic CEC functions like one touch play, auto TV On and auto device off.
- Prepared & validated full functional test cases for TV related features.

Project #7 : GMI / Certification testing and functional testing

Product : GMI/ DVBS2/PVR/MEDIA CENTER/HBBTV/NETWORK BROWSER/CI+
Customer : GMI - GERMANY

Description:

DVBS2 – PVR – MULTIMEDIA CENTER –HBBTV - NETWORK BROWSER/ -CI+ - MPEG4HD decoding

Tested Functions

- Tested FTA features [AV decoding, TV/Radio Service list & Management, EPG, Teletext, Subtitle, CC]
- Validated PVR features [Dual recording, recording playback, Event Timer recording, Remainder, Time shift recording, standby recording, Subtitle & Multi audio recording]
- Tested the Browser and Generic Browser test cases according to the DTV CI+ (v1.3) profile spec.
- Validated the HBB TV application

EDUCATIONAL BACKGROUND

Examination	Discipline	School/college	Board/ University	(%)
B.E	ECE	PSR Engineering College.	Anna University	69%
Secondary	Computer science	Srivi Lions Matriculation school	State Board	76%
SSLC	—	Srivi Lions Matriculation school	Matric	83%

PERSONAL DETAILS

Date of birth : 30-06-1989
Age :34
Sex : Male
Fathers name : Balasubramanian P
PAN card no : ASKPV1485G
Passport No : J1941635

DECLARATION

I hereby declare the information stated above is true and correct to the best of my knowledge and belief.

Place:
Signature:

Date:
Name: VIGNESH B