Amit Ranjan

E-Mail: ranjan4amit123@gmail.com Phone: +91 8289071832

EXPERIENCE

Complete 4 years' experience (protocol testing – 3.3 years)

PROFILE SUMMARY

- 1. Working on **5G** and LTE protocol validation and **Log-analysis**.
- Good Experience of 5G-NR, SA, NSA, Call Flow VoNR, Epsfb and 5G-NR/VoNR, VoLTE architecture and call flows, 5G Performance Testing like Handover, Cell-Reselection on Field Test
- 3. Good Experience on **IMS**, **VolTE**, **SMS**, **VOIP**, **Vo-Wifi**, **VT**, IMS service test execution, log analysis and debugging, SDP, Diameter and **SIP Protocol** (RFC 3261) and It's end to end call flow like Call hold, Call Forward, call parking, call conference etc.
- **4.** UE audit using the **Wireshark** tool based on **UE PCAP** Logs seeing SIP message for **VoLTE** and **VoNR** KPIs.
- 5. Good knowledge of Linux and Python.
- 6. Working on **Qualcomm, Media Tek and Unisoc** proprietary tools like QXDM, Q-CAT, P-CAT, QFIL, ELT and Logel.
- 7. Ability to interact with end users, adopt new environment and quickly learn new technologies in a dynamic environment. Good analytical skills and ability to work effectively as a team member.

SKILLS & EXPERIENCE

OS: Windows, Android, KaiOS, Linux.
Protocols: SIP, SDP, Diameter, RTP, RTCP, NGAP

Domain: 5G-NR, 5G-VoNR and VoLTE

Software tools: Wireshark, QXDM, Q-CAT, P-CAT, QFIL, ELT, Logel, Cat-Studio, Putty,

WinSCP etc.

Experience of:

- Very good technical understanding of upto 3gpp Releases 15 specification for 5G and 4G (RRC, NAS, MAC layer etc. as applicable)
- Execute mobility test cases to verify the call performance, voice quality Handovers, data performance, **5G/4G** Cell-Reselection, RRE, OOS.
- Debugging and Performed analysis in LTE, VoLTE and 5G technologies for finding the
 possible root cause and location functionality of devices (like mobile phones, laptop, WiFi, tabs, swap machine, Electric smart prepaid meter) End user product Testing and
 benchmarking of products and Performance.
- Device chipset performance testing like modem test, feature and functional test, thermal test, build regression test and FOTA test.
- Developing Test cases on IMS Stack behaviour with different protocols and timers.
- Maintenance for pre and post launch products, including reproduction and diagnosis of problem. Preparation of bug & test summary report.

ORGANISATIONAL EXPERIENCE

Margistech Pvt Ltd.

(April 2022 - Present)

Role: Protocol Test Engineer.

Project: Wonderland DNI for Jio Mumbai.

Key Result Areas:

- Responsible full DNI device test and validation and checking the Modem Logs, Blocker and Critical Issue.
- Creating Prototype models based on customer requirement.
- Field testing, sanity testing, device testing, android testing mobile application testing, manual Testing Feature testing, Functional Testing, System Testing, Device Flashing, Retesting, Mobility Stationary Testing, and full scope of Testing
- Creating Signalling Config file for Manual bulk configuration.
- Troubleshooting errors (signalling & media) if any during deployment.
- Involved in testing of different call scenarios based on SIP including supplementary call services like (call hold, call transfer, call busy, call forwarding etc.)
- Knowledge on SIP, SDP, and Diameter protocols. Knowledge on SIP Protocol (RFC 3261) and It's end to end call flow like Call hold, Call Forward, call parking, call conference etc.
- Testing VoIP features including call hold, call transfer, call conference etc.
- Writing test cases based on different sip call scenarios and execution on DUT.

Telesyia network Pvt Ltd

(April 2019 to December 2019)

Role: Drive Test Engineer. Project: VIL (Ericsson)

Key Result Areas:

- Drive test of GSM, WCDM, LTE, VoLTE.
- SCFT report making, SCFT coordination, SCFT report validation, measurement of
 physical parameters like latitude, longitude, azimuth, tilt, antenna height, tower
 height. identification and rectifying Sector and Cyclic Swaps and other
 implementation issues. I have handson knowledge optimization of the site
 performance.

ACADEMIC DETAILS

2017: B. Tech in Electronics & Communication Engineering, from RIMT Institute of Engineering & Technology **Punjab**, with 59.9%.

2013: 12th from B.S.E.B with 75.2%.

2011: 10th from High School Darbhanga with 66%.

PERSONAL DETAILS

Date of Birth : - 30thDec1995

Address : - Madhubani (Bihar), 847409

Gender :- Male

Language : - English, Hindi, Maithili

Marital Status : - Un-married Nationality : - Indian