



# INDRAJEET PRAJAPATI

Senior System Engineer



10 Years 8 Months



inpr49@gmail.com



7000035178



www.linkedin.com/in/inpr49



## Key Skills

L1 L2 L3 Log analysis

LTE/5G Protocol Testing

Experience of UE simulators

Manual Functional Testing

Regression Testing

LTE/5G Feature testings

Shell Scripting

Python

Simnovus/Amarisoft UE Simulators



## Technical Skills

Linux

Python

shell

Log Analysis

QXDM

QCAT

WireShark

XCAL

TEMS

Iperf

Jira tool

Amarisoft

TM500

Robot Framework

Docker

Kubernete



## Certification

- Python with Automation



## About Me

I have overall 10.8 Years of experience (5.2 Years in 4G/5G Testing and 5.6 Years as a RF and DT Engineer). I have worked in LTE/5G testing and log analysis of all the protocol layers (NAS, RRC, PDCP, RLC, MAC, PHY) using UE simulators, QXDM, Wireshark tools.



## Profile Summary

- Strong experience to validate 4G/5G RAN features using UE simulator, QXDM and other tools.
- Good experience of debugging the LTE/5G logs of (NAS, RRC, PDCP, RLC, MAC, PHY) Layers.
- LTE/5G Log Analysis of call drop, Handover failure scenario, Radio Link Failure issue, MIMO and Carrier Aggregation.
- Testing and debugging throughput scenarios with different network configurations by using Iperf traffic generator tool.
- Good understanding of 4G and 5G (SA & NSA) architecture and call flow process.
- Good understanding of IMS Architecture and VoLTE, VoNR call flows.
- Good understanding of H.O. measurement events (A1, A2, A3, A4, A5, A6, B1, B2).
- Good understanding of LTE/5G NR fundamentals such as 5G Numerologies (SCS), Carrier aggregation, Beamforming, sub6G (FR1).
- Strong experience in Recording & debugging Logs using QXDM, QCAT, XCAL, TEMS & Wireshark.



## Education

2012, Full Time

B.Tech/B.E., Electronics/Telecommunication

Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal



## Personal Information

Date of Birth	8th July 1990
Gender	Male
Address	Whitefield
City	Bengaluru
Country	INDIA
Marital Status	Married



## Other Interests

- Read Blogs, Websites and watch tutorials related to technical fields
- Support Students on Career Guidance and Project
- Stack overflow Q&A
- Write answers on Quora to relevant questions



## Work Experience

July 2022 - Feb 2024

Senior System Engineer

**Simnovus India Pvt Ltd**

### Key Result Area

- Involved in QA activity, creating testcases, perform testing, finding bugs and errors, analyzing logfiles and reporting bugs to the development team using Jira portal.
- Sanity Testing (Throughput Test in LTE, 5G-SA & NSA mode) Volte, VoNR, Handover, Carrier aggregation.
- Performance and regression testing on the latest build released by the development team.
- Testing of Enb/gNB Protocol stack with lab environment.
- Log analysis of different layers (NAS, RRC, PDCP, RLC, MAC, PHY) based on 3GPP Specifications.
- Using ORU-Simulator in lab environment to test ORAN 7.2x Split functions (Configuring Low Phy parameters at ORU Simulator)
- HO, MIMO and Carrier Aggregation Log Capture and Analysis.
- LTE/5G Log Analysis of call drop, H.O failure scenario, Radio Link Failure issue, MIMO and Carrier Aggregation.
- Bug tracking and reporting the issues to the respective team and tracking the issue with them.
- Investigating, explain, and report UE or network errors, including collaborations with other teams.
- Working on test specifications: Create/update/review test documents (test plans, test cases, test reports, functional specifications, procedures) using Amarisoft documents and 3GPP.
- Carry out basic parameter checks such as RRM (RSRP, SINR, RSRQ, RSSI) and Throughput during the Test.

Jan 2019 - June 2022

LTE Testing Engineer

**Integrated Wireless Solutions**

### Key Result Area

- Perform Cell Selection & Reselection procedure and Logs Analysis
- Perform Attach/Power on procedure and log Analysis of UE
- Different call scenarios performed for voice call like Call set Up time, MO, MT, Call Initiation and capture the logs..
- End to End Testing of ENB Protocol stack with lab environment.
- The Project focuses on N/w Testing, log analysis and verification.
- Log analysis of different layers (NAS, RRC) based on 3GPP Specifications.
- Wireless protocol test solutions of different Layers (RLC, RRC and MAC).
- MIMO and Carrier Aggregation Log Capture and Analysis.

Feb 2016 - Dec 2018

RF Engineer

**Linkquest Telecom Pvt. Ltd**

### **Key Result Area**

- Coordinating with the circle team for all RF related issues.
- Pre & Post Launch RF KPI & Log File Analysis & Optimization of 4G LTE, KPI (Accessibility, Retainability, Mobility, Throughput KPIs) & Provide Respective Solution of Poor RF Parameter .
- 4G LTE, Pre & Post Logs File/Report/ KPI Report Analysis & Optimization of Network KPI.
- Analysis Degrad KPI Report & Verifying the LTE 4G RF Parameter for Single & Cluster Site Like: SITE INFO, PCI Verification, , EARFCN Verification, BW, RSRP, RSRQ, SINR, CINR, EARFCN, BW, Latency, CSSR, CSFR, RRC Success, ERAB Success, RRC Drop, ERAB Drop, HOSR Failure, User DL-UL Throuput, PDSCH FTP UDP DL UL, PUSCH FTP UDP DL UL etc.
- Analysis & Provide Recommend solutions to Improve KPI of Network.
- Responsible for cluster optimization and post processing the data for further improvement.
- LTE Network planning, Testing and trouble shooting of Network attach detach issues in LTE network.
- Analysis of log files

May 2013 - Nov 2015

Drive Test Engineer

**Vedang Cellular Services Pvt. Ltd**

### **Key Result Area**

- IN 4G check the parameter RSRP LEVEL, SINR, PDSCH & PUSCH Throughput.
- Finding the reasons for any poor RSRP, RSRQ, CALL DROPS, delayed Handovers & Suggesting the possible solutions.
- Identification of correct Handover Targets for sites on all major & secondary traffic parteries.
- Coverage and Capacity planning according to the necessit.
- Analyze drive test data and take necessary corrective measures.
- Site Optimization- Existing & New Sites for Network.
- Cluster tuning by checking and changing co-channel and adjacent channel interferences in