SYSTEMS VERIFICATION ENGINEER

Summary

To obtain a full time employment position that would be challenging and hone my skills in Networking and Wireless Communications field and perform my best towards the growth of the organization.

Highlights

- Operating Systems: Windows Series, LINUX, UNIX.
- Languages: C, VBA, Java Scripting, Python
- Protocols: TCP/IP, OSI, BGP, OSPF, MIPV6,LAN/WAN, XML, DNS, SIP, DIAMETER.
- Wireless: LTE, VoLTE, IMS, WCDMA, GSM, UMTS,CDMA2000, 1xEVDO.
- Tools: QXDM, STT, National Instruments, QPST, Netmon, QC, Wireshark, JIRA, Metrico Nomad, Datum,OPNET Modeler, MS-Office, TEMS, Filezilla, Iperf.
- Network Simulators: RnS CMW500 ,CMU200, Agilent 8960, Spirent, Anite, Anritsu ME7873L, UPV.

Accomplishments

- Wireless LAN protocols: 802.11 a/b/g/n/ac.

Experience

12/2014 to Current

Systems Verification Engineer Ocado Group Plc ï¼ Cincinnati , OH

- Possess good understanding of GSM, UMTS, LTE, IMS technologies.
- Possess good understanding of different data Protocol stacks such as TCP, IP, UDP and IPV6 etc.
- Possess hands on experience in Test case generation & execution under diverse operational scenarios.
- Possess hands on experience in Log Analysis on tools such as STT, QXDM, Issue Debugging and root cause analysis.
- Possess experience on both Manual and Automated testing with the usage of call boxes like RnS CMW500, CMU200, Spirent, Agilent 8960, Anite using Python/Java/VBA scripting.
- Experience in performing Protocol and Sanity testing, IRAT testing, LTE_3G_2G KPI Testing, System Testing, SMSC/MMSC testing, Wifi testing, Integration testing, Rigorous Testing (expert testing) and Regression testing on AP and CP binaries to discover maximum bugs.
- To execute Feature release testing on Intel Chipsets.
- Performed ICC, 2CA/3CA/4CA test cases to measure throughput, UL/DL BLER, EVM based on the modulation techniques used and configured the TBSI/Code rate, Band, Channel info, Bandwidth, Resource blocks in CMW500.
- Performed CMW LTE protocol testing using Linux/Windows environment.
- Performed objective Audio testing on IMS network and analysed PoLQA /MOS values using UPV audio analyser.
- Performed IMS and VoLTE testing on ATT/TMO/CMW500.
- Performed audio quality testing for VoLTE, SRVCC using CMW,Spirent itest , VAMOS using 8960, fast dormancy testing with Anite SAS for both windows and Linux platforms.
- Executed SMSC/MMSC testing on the modems using AT commands.
- Engineering test cases execution for regression & non-regression cycles and preparing reports.
- Hands on experience on client proprietary automation tools and run automation activities using Python/Java/VBA scripting.
- Experience with Quality Center for tracking and updating results.
- Defect Analysis, tracking and management and Defect Verification.
- Performing RF Calibration and updating the NVM Data and IMEI using CLI and internal tools.
- Test Case Architecture and execution and performed OTA (over the air), Wifi and Bluetooth testing on Android Devices.
- From: L&T Techservices.

08/2013 to 11/2014

Modem Software Applications Test Engineer Qualcomm Technologies Inc ï¼ City , STATE

- Worked on L1 & L2 software modules to analyze and debug issues, suggest and implement changes as per the requirement from customers/carriers and adhering to TIA/IS standards.
- Conducted VoLTE and IMS testing on different modems on CMW500.
- Verified SIP call flow and SIP commands using QXDM.
- Job role includes interacting with different tech teams and find root cause analysis of various modem software stability issues.
- Gained experience and knowledge on various Chipsets, on-chip debugging using Lauterbach Trace 32 ICD, debugging modem stability issues using Trace32 simulator and providing critical fixes for customers on various projects.
- Gained experience & knowledge on wireless networks and physical channel layers, network simulators and other internal SW debug tools.
- Worked on MTP bringup for debugging customer reported issues and collect logs for gathering further data points.
- Conducted LTE data throughput testing on RnS CMW500 for Cat4 and Cat6 Performance to verify and validate throughput numbers on various chipsets.
- Worked on Windows phones and tablets and analyzed qxdm and mbb logs for internal debugging from AP and CP sides and used Wireshark and Netmon for analyzing Network logs.
- Provisioning devices using MCFG tool for different carriers based on the modem binaries.
- Conducted carrier validation testing at Cetecom lab for certification blocking and gating issues.

02/2012 to 08/2013

Modem Field Test Engineer Collabera Inc ï¼ City , STATE

- Analyze, monitor and develop new Samsung Devices for KPI improvement.
- IRAT and CSFB Testing for Inter/Intra cell Handover and Cell reselection performance.
- Performed IMS/VoLTE testing , LTE/CDMA KPI and Protocol Regression testing and Network Interoperability tests.
- Data throughput performance testing using Metrico Datum tool.
- Audio voice quality testing on ATT network using Metrico NOMAD tool.
- Perform RF calibration and execute stationary test cases like Tethering, DUN and Mobile hotspot tests with testing tools like nNEXT, QXDM, QPST, ETS log analyser and X-cal.
- Performing various types of activities like: RTN Reset, HFA Activation, data feature test with OMA-DM (Activation/ PRL Update).
- Capture AP, CP and Silent logs from DUT and performed initial analysis using Samsung's internal diagnostic monitoring tool for optimization purpose.
- Create a detailed report of all the issues seen and create CQ/PLM for the new issues using IBM Rational Clear Quest.

11/2011 to 02/2012
Field Engineer Bluetelecom Inc Avion Systems Inc ï¼ City , STATE

- Install and test network cell site in LTE/UMTS.
- Collect physical measurement for cell sites.
- Identify major call-related problems (dropped calls, interference, hardware problems etc.) and provide scope for performance improvements.
- Collect physical UE measurements (SC, RSCP and Ec/No) for all the cells in the Active set using TEMS Investigation wireless network optimization software package.
- Perform optimization drive tests using TEMS software.
- Conducted IFHO, IRAT and verification tests.
- Performed Single Site Verification (SSV) and Single Site Shakedown (SSD) of 4G LTE sites.
- Assist senior RF Engineers in improving performance by giving recommendations to improve call quality by adjusting electrical and mechanical tilts, adding neighbors for successful handoffs and to reduce dropped calls due to coverage holes.

Education
May 2011
Master of Sciences : Electrical Engineering New Jersey Institute of Technology ï¼ City , State Electrical Engineering
May 2009
Bachelor of Engineering : Electrical and Electronics Hindustan College of Engineering ï¼ State , India Electrical and Electronics
Skills
3G, AP, Audio, automation, automation tools, BGP, C, Calibration, CLI, hardware, SC, client, Debugging, DNS, DUN, XML, fast, GSM, IBM, IMS, Intel, IP, Java, Java Scripting, LAN, LINUX, mechanical, MS-Office, MOS, Windows, 2000, modems, modem, Network, networks, NOMAD, Operating Systems, optimization, OSI, OSPF, PLM, Protocols, Python, Quality, Quest, requirement, SAS, scripting, SMSC, TCP/IP, phones, UMTS, UNIX, validation, VBA, WAN