

KRISHNA CHAITANYA SURYAVENKATA EMANI

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Professional Summary

Highly enthusiastic and dedicated individual with very good technical and problem-solving skills in commercialization of Wireless (WLAN) Chipsets on Mobile Platforms (Android). Possess sound knowledge of WLAN Performance metrics, MAC Protocol and PHY level concepts. Appreciated by the top management for demonstrating exceptional leadership and motivational skills in handling critical projects within the stringent deadlines. My main strengths include strong technical knowledge complimented with flexibility, ability to learn quickly, excellent leadership and interpersonal skills.

Work Experience

Qualcomm India Private Limited

Current Position:

2009-Present

Engineer, Staff/Manager

- WLAN Test Architect currently leading the WLAN Performance and PHY QA Team, handling tasks across different Qualcomm WLAN chipsets and various WLAN generations (802.11 AC, 11n, 11g, 11b, 11a) including MU-MIMO.
- Started working on Machine Learning Algorithm to automatically classify the automation failures based on the log analysis using Text Classification techniques and Algorithms like Naïve Bayes, SVM.
- **Projects: Xiaomi/OPPO/VIVO/Google Pixel 1/2/3 WLAN Commercialization**
Developing Strategies and test plans for Performance Testing based on the WLAN Chipset Design, System Level Changes, Inter Technology Dependencies, New Features and OS dependencies like Google L, M and N Upgrade and making sure the commercialization happen with least test escapes.
Planned HAL-PHY Testing across different QCOM WLAN Chipsets for different Transmit characteristics like Tx Power Accuracy, Tx EVM, Tx SEM accuracy, Frequency Accuracy and Receive Characteristics like RSSI Accuracy, PER Sweeps, MIL Levels on Physical Layer Test Equipment like IQXEL-80, Anritsu-MT8860C.
- Contributed significantly towards smooth commercialization of MSM8916/MSM8909 Chipset into the Mid-Tier segment devices (QCOM's first LTE Based Chipset in the Mid-Tier Segment). Worked during the WLAN bring-up phase and found critical issues. Followed it up by leading the Project as WLAN QA Lead working with different partnering teams (Software, Prod Management, Product Engineering, and Customer Engineering) and ensured high quality testing and SW Delivery.
- Worked as a lead for Legacy Fast Roaming (LFR), 11k, 11r, 11v team across different WCN Chipset commercialization.
- Lead BTC (Bluetooth Coexistence with WLAN) Team of 3 along with an Individual Contributor Role in the team. Provided invaluable suggestions and enhancements to the BTC implementation during design review discussions and the issues found during testing. As a team lead ensured the team delivered many critical projects on time with huge contribution towards seamless commercialization of Qualcomm's first WLAN+BT combo chipset in the market and many more that followed.
- Provided on-site support at Huawei, Beijing office towards commercialization of Qualcomm's first WLAN chipset (WCN1312) with exceptional dedication and determination to stabilize our solution and make sure product is launched within the tight deadlines.
- Provided on-site support to customers like Samsung, LG, Pantech at their Korea office to ensure smooth commercialization of Qualcomm's first integrated WLAN+BT Chipset (Prima).
- Took lead and introduced many critical process initiatives in the WLAN Test team at Qualcomm and won accolades from global teams for the initiatives, working on them and bringing them to closure.
- Worked very closely with the SW Development teams to enhance the logging mechanisms to help identify and root cause the issues quickly across different features and platforms over the due course at Qualcomm.

Sprint Corporation

Traffic Management Engineer

- Monitor the voice network of Sprint Nextel and design cost-effective routing while maintaining the required Grade of Service Levels. Worked on all three networks of Sprint (CDMA, iDEN, Wire-line) and various vendor platforms (Alcatel-Lucent, Nortel etc).
- **Nortel DMS 250 Offload onto NGVN Network Phase-I:** Represented the Traffic Management Team as the Single Point of Contact (SPOC) for this offload project and assimilated the project knowledge very quickly and gained excellent End-to-End scope of the project. Won accolades and an excellence award for camaraderie and commitment in this project.
- **Establish Wireless to Wireless Connections:** Worked with other Wireless Carriers (Verizon, AT&T, T-Mobile and Neutral Tandem) to avoid LEC (Local Exchange Carrier) charges and contributed in savings close to \$150,000 per month.

Intern III in CNI Migrations Group

Summer 2007

- Call Through Testing Procedures.
- E911 calls testing for Migrations

University of Missouri-Rolla

2006-2007

- Research Assistant under Dr. Rosa Zheng.
- Teaching Assistant for Circuits 1 and Circuits 2 Laboratory.

Educational Qualifications

M.S. in Electrical Engineering

University of Missouri-Rolla

GPA 3.87.

January 2006-December 2007.

B-Tech Electronics and Communications

JNT University, Hyderabad

71/100.

Project and Research Experience

- CATERPILLAR Inc. university challenge project for improved CAN bus Communications.
- Thesis on "Application of Hybrid ARQ to Controller Area Networks".
- Digital Communication over Acoustic signals using QPSK Modulation. (MS&T)
- Literature Review on WiMax and comparison with existing protocols. (MS&T)
- Reflection, Diffraction and Penetration in wireless communications with Radio-plan. (MS&T)
- GPS Error Modeling for Precise Positioning at Airports Authority of India, Hyderabad.
- Study Project on G.P.S. and R.F.I.D. Technology at C.M.C., Hyderabad.

Publications and Certifications

- Presented a paper 'Improvement of CAN BUS controller by using Error Correcting Codes' at IEEE Region 5 Conference at University of Arkansas, Fayetteville.
- Presented a paper at IIT, Kharagpur for National Conference on Communications NCC2005 on 'GPS Receiver Position Data Analysis for Accuracy Improvement'.
- Third prize in Technical quiz in communications conducted by ASIA PACIFIC TELECOMMUNITY for YOUNG PROFESSIONALS AND STUDENTS FORUM (APTYPs) in IETE, HYD.

Computer Applications, Programming Languages and Skills

C#	PERL	QXDM	QPST	Android	IXIA Chariot	Python
MATLAB	802.11 standard		Wireshark	OmniPeek	Android System Logging	
Bluetooth Coexistence with WLAN			Project Management		Troubleshooting Critical	
IssuesAutomation Framework			Machine Learning			