# Sundervelu Tandalam

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http://www.sundervalu.com

#### SKILLS

Technologies and Protocols: LTE, LTE-Advanced, VoLTE, LTE-Unlicensed, OFDM and TCP/IP.

Tools: QXDM, APEX, QMI TestPro, Actix, X-Cal, KPI-ATS, Spirent Nomad, SanJole, LogKit-3 and Wireshark.

Scripting Languages: Perl Scripting, Python Scripting and Batch Scripting.

#### **PROFESSIONAL EXPERIENCE**

## Engineer I, LTE Modem Systems Test, Qualcomm, San Diego, CA. Oct 2016 to Current.

- Developed test plan and evaluated KPI's for 1Gbps 10 Layer with 256QAM downlink testing on Telstra in Australia.
- Driving all LTE Field Testing and Debugging issues on SKT, KT and LGU+ LTE cellular networks.
- Evaluated Modem performance and KPI's for 4x4 MIMO, Carrier Aggregation (4DLCA, ULCA) on Korean Networks in the Field.
- Actively involved in bring up, design and provided a Demo on the working of KPI-ATS, an automated testing tool.
- Working with Dev in bring up of LogKit-3, an On-Device logging app for KPI Testing for Field Team.

#### Field Engineer, LTE Modem Systems Test, Qualcomm, San Diego, CA. Feb 2016 to Oct 2016.

- Analyzed Field testing data and created KPI reports for latest Qualcomm Wireless Modem Software.
- Rendered competitive testing of Apple iPhone 7's, Samsung Galaxy S7's and Huawei Mate 9.
- Developed and Authored the technique to collect baseband and IMS logs from Un-Jailbroken iPhone's.
- Measured Audio Quality performance on MTPs and Commercial Phones.
- Carried out testing on Interference Cancellation, Link Quality Estimation, XLAT features in the Field and LTE-U on an experimental lab network.

## Field Engineer, LTE Modem Systems Test, Qualcomm, Bellevue, WA. Jan 2015 to Feb 2016.

- Performed LTE-A functional and KPI testing on upcoming Snapdragon MSM and MDM chips.
- Tested 3 Carrier Downlink Carrier Aggregation, 256QAM and 4x4MIMO on live network.
- Developed automation scripts for testing and issue triaging using Perl (Automated TCP Dump collections), Python (Automated LQE testing) and Batch (Automated adb commands) scripting.
- Assisted in multiple customer related issues with joint testing and internal issue reproduction.

## **Technical Support Engineer,**

CSS Corp Pvt. Ltd., Chennai, India. May 2010 to May 2012

- Provided VoIP technical assistances for Vonage Inc. with technical issue resolution of 98% and customer satisfaction of 95%.
- Managed a team of ten in the absence of the manager and trained 6 batches of new hires.

#### **C**ERTIFICATES

**Certificate of Recognition** for excellent execution and overall contribution to the Rootmetric project (Qualcomm) August 2016. **Cisco Certified Network Analyst** (CCNA).

#### **EDUCATIONAL QUALIFICATION**

## University at Buffalo, State University of New York, Buffalo, USA.

Master of Science, Electrical Engineering (Signals, Networks and Communication), June 2014

#### St. Peter's Engineering College, Affiliated to Anna University, Chennai, India.

Bachelor of Engineering, Electronics and Communication Engineering, November 2010

#### **PROJECT PARTICULARS**

- Techniques to Increase Bandwidth in Near Field Communication by analyzing various techniques like Direct Antenna Modulation, Sigma-Delta Modulator and MIMO methods.
- Designed a Mismatch Filter with Chip Compression using Barker Codes for modern digital communication.
- ElecTrim, a startup concept using Powerline Communications with an in-house designed system with projected positive financial growth.
- Spy Rover controlled by GSM module with live video streaming via a Radio Frequency camera.

## PROFESSIONAL AFFILIATIONS

Member, Institute of Electrical and Electronics Engineers

Member, IEEE Communications Society