Yousuf Ali Moiz

6151 Mountain Vista St, Apt 1822 | Henderson, NV 89014

Phone: +1 (702) 786-4053 email: yhussain786@yahoo.ca

25 YEAR TELECOM EXPERIENCE FROM 1997-2021

25 years of experience in Telecom industry as a Radio Frequency design specialist and optimization. I worked with four major operators across the globe (**ETISALAT, TELUS, T-MOBILE & VERIZON**).

MACRO DESIGN & OPTIMIZATION

Worked on green field project for Macro design to provide cellular coverage (GSM, HSPA, LTE+, 5GNR) for urban, suburban, and rural areas. The duties included survey, planning, implementation, and integration. Survey included site visits where I captured existing coverage data through test mobile. Using this data, I planned sites geographically using one of the planning tools (Planet, Atoll, Ericsson Engineering tool). Prediction plots is then run to simulate coverage (RSRP), Quality plots (RSRQ) and Data throughput. Once satisfied with preliminary coverage, Site are selected and passed on to real estate to acquire the candidates. Once the sites candidates are accepted by the landowner, project teams build the site based on the Engineer RFDS which includes equipment, cables, tower specification, Antenna type, Antenna parameters, Power etc. Site is then built and commissioned to put into service. Finally drive test is carried out to make sure site is integrated as planned and heat map is generated and compared with pre-analysis. Few tweaks are done for optimal performance. Weekly stats are monitored for newly constructed site. Major KPI's (Key Performance Indicators) includes call access, Call drops, random access failures, Handovers, data throughput (uplink and downlink, etc. This makes sures site is healthy and performing with no major issues that can impact the service to public.

In addition to macro design, also handled special projects where temporary cellular deployment was carried to cater high-capacity events. Events included Dubai Global village, New year's events, GITEX, football/soccer events etc. Using historical data, sites were designed deployed to handle the capacity.

IN-BUILDING DESIGN & OPTIMIZATION

Worked on various In-building projects to provide indoor coverage and capacity (GSM, HSPA, LTE+, 5GNR) technology. Projects included shopping malls, Arenas, High rise buildings, Underground subway system, Airports, Tunnels, small office buildings. Also designed In-building systems for high-capacity events such as IMF, LVCC, Musical events, etc.

Inbuilding design is carried out in iBwave. Floor plan is imported and scaled as per the scale on the google map. Walls, horizontal surface, elevators, windows, doors are imported from the AutoCAD drawings and corresponding materials are assigned. A 3D model is created of the venue being designed. Cellular system is designed using antennas, splitters, combiners, cables, RF subsystems, active and passive components. Simulation for the coverage, Quality is run on the model. Heat map is studied and adjusted as required until 95% of the building is covered by the inbuilding system. The indoor signal is also measured such that the outdoor signal penetrating the building is 10 dB less. Making sure the inbuilding signal is dominant over

the outside macro. Once satisfied the design pdf is generated and handed over to real estate to get approval from the landlord. If the green light is given, project manager constructs the site based on Engineer's RFDS. Site is then built and commissioned to put into service. Finally Walk test is carried out to make sure site is integrated as planned and heat map is generated and compared with pre-analysis. Few tweaks are done for optimal performance. Weekly stats are monitored for newly constructed site. Major KPI's (Key Performance Indicators) includes call access, Call drops, random access failures, Handovers, data throughput (uplink and downlink, etc. This makes sures site is healthy and performing with no major issues that can impact the cellular service to public.

WIFI DESIGN & OPTIMIZATION

Worked on various WIFI projects to provide indoor coverage and capacity. Projects included shopping malls, Stadium, Arenas, Airports, and small office buildings.
WIFI design is also carried out in iBwave, instead of cellular technology, it uses WiFi standards for the 2.4 & 5 GHz band. Design process is very similar to cellular except it uses access points, Cisco switch and CAT6 cabling. Active and passive survey is carried out by Air magnet tool to test the WIFI coverage.

RF DESIGN & REGULATORY

During my 2 years in United states, I worked for VERIZON as a contractor. Build RFDS and did regulatory work for newly built and existing sites for Carolina, Georgia-Alabama, and Florida market. Regulatory work for construction and Inservice milestones which included checking RF power for all the bands being deployed and in align with FCC regulatory. Generating field strength plots for 850 bands and making sure the signal doesn't exceed the SAB and CGSA boundary. Doing mitigation for rooftop sites and making sure the RF propagation is not hazardous to public.

During my 25 years I have gained following experience with tools and technologies.

HIGHLIGHTS OF QUALIFICATIONS

- DAS and WIFI design expert for indoor/outdoor buildings/complexes and arenas.
- Active and Predictive Survey for RF and WIFI Design.
- Site survey, site walk prior to validate the design prior to construction.
- Field CW Test & Model tuning in iBwave
- Pre & Post coverage analysis & KPI monitoring for Performance.
- Post processing of benchmark data between carriers
- Carrier power sharing for neutral host design (Multi-carrier DAS)
- HSPA/LTE Network design using Active/Passive Distributed Antenna Solutions (DAS) solution
- Volte optimization for DAS In-building
- Hands on experience with Cisco, Juniper, Aruba Network Design and Implementation
- Expert user of Microsoft word, excel, Power point, SAP, Oracle.
- IBwave Design Enterprise (L3 Certified) and Planet Info vista (RF Design & Prediction)

- Air magnet (Wi-Fi POST Processing) and Windcatcher (RF POST Processing)
- ActixOne, MapInfo, Atoll & Planet expertise
- Knowledge of Active DAS solution commissioning
- Knowledge of Nokia ASiR active solution
- Knowledge of 5G mmWave, LAA
- Knowledge of VERIZON tools – FUSE, Airspace, Roof master

Major Projects handled:

No	Venue Name	Date	Solution Type	OEM Vender	Personal Role of the Candidate on the assignment
1	Rexall Place, Edmonton - AB	June 2011 - Feb 2012	Passive DAS	-	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
2	Southgate Mall, Edmonton	Jan 2012 - May 2012	Active DAS - ION B	Commscope	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
3	University of Alberta, Edmonton - AB	01 Jan 2012 - 30 Jun 2012	Active DAS - ION B	Commscope	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
4	NAIT College , Edmonton -AB	01 Jan 2013 - 25 Sept 2013	Active DAS - ION B	Commscope	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
5	Commonwealth Stadium, Edmonton - AB	April 2014 - June 2014	Passive DAS	-	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
6	Airtport, Fort McMurray - AB	May 2014 – Sept 2014	Active DAS	Delta Node	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
7	Commonwealth Stadium, Edmonton - AB	April 2015 -Sept 2015	WiFi	CISCO	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
8	ROGERS Place , Edmonton - AB	June 2016 - Sept 2016	Active DAS	BTI	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
9	Edmonton Int. Airport - Edmonton - AB	Jan 2018 - TBD	Active DAS - Lampsite	Huawei	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
10	Kingsway Garden Mall, Edmonton - AB	Feb 2018 - TBD	Active DAS - Lampsite	Huawei	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
11	Londonderry Mall, Edmonton - AB	Mar 2018 - TBD	Active DAS - Lampsite	Huawei	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
12	Stantec Tower, Edmonton - AB	Mar 2018 - TBD	Active DAS - Lampsite	Huawei	iBwave Design, Modeling and BOM, Performance monitoring ,new Build
13	Aloha Stadium, Hawaii - US	Aug 2019	Passive - DRAN	Ericsson	Real time monitoring
14	Red Rock Casino, Las Vegas , Nevada	Aug 2019	Active - DAS	Ericsson	Performance monitoring
15	Encore & Wynn Casino, Las Vegas, Nevada	June-July 209	Active DAS	-	Optimisation to improve the SINR & Noise

PROFESSIONAL EXPERIENCE

Sr RF Engineer Technician — April 2021- Till date

FES / Verizon, Henderson, Nevada - US

- Working as a contractor for VERIZON.
- RF design for macro sites in Atoll and generating construction RFDS.
- Regulatory work for construction and In-service Milestone for Georgia/Alabama/Carolina/Florida market.

- Generating compliance report for Macro and small cells using Inhouse RAVE tool and Roof master software.
- Generating field strength and contour plots for 850 band in Atoll and making sure the power does not exceed max regulatory power for the county.
- Running Airspace for new built sites.
- Reviewing Mitigation sign after construction complete and making sure proper signage are placed for the 4G & 5G sites.

Sr RF Engineer Technician **Sep 2019 - April 2021**
MOBILITIE / Verizon, Henderson, Nevada - US

- Worked as a contractor for VERIZON.
- RF design for macro sites in Atoll and generating construction RFDS.
- Regulatory work for construction and In-service Milestone for Georgia/Alabama/Carolina/Florida market.
- Generating compliance report for Macro and small cells using Inhouse RAVE tool and Roof master software.
- Generating field strength and contour plots for 850 band in Atoll and making sure the power does not exceed max regulatory power for the county.
- Running Airspace for new built sites.
- Reviewing Mitigation sign after construction complete and making sure proper signage are placed for the 4G & 5G sites.

Sr RF In-Building DAS Design Specialist – Design & Performance Jun-2019 – Sep 2019
T-Mobile, Las Vegas, Nevada - US

- RF DAS Design review for Raiders Stadium- Las Vegas, Orleans Casino & Hotel using IB-Wave software. Proving suggestion to improve SINR by using proper antenna type.
- Performed DAS performance by tweaking parameter to meet T-Mobile KPI's.
- Live monitoring special event for Aloha Stadium – Hawaii and changing parameter real time to balance traffic among carrier/sectors.
- Generating performance report for major events for higher management and providing suggestion for future improvement where required.
- CIQ data fill for new site integration.
- Review Walk test data for newly site integrated.
- Performed root-cause-analysis and devising solutions to solve any network and design issues for major venues such as Casino, Convention center & Arena.
- Solved customer related issues by visiting venues using test Wind mobile
- Commissioned active DAS site for T-Mobile with DAS Vendor and RF In-building Engineer

RF In-Building Specialist – In-Building DAS and Wi-Fi Solutions Feb-2011 – Jun 2019
TELUS Mobility, Edmonton, Canada

- RF Cellular Design for Commonwealth Stadium using IB-Wave software. Passive solution with 14 sectors using five beam antennae, designed 3d model from iBwave and

model tuned with CW test.

- RF Cellular Design for shopping malls such as Millwood's town center using IB-Wave. Software. An active solution (CommScope Ion B) with distributed Remote units. Designed 3D & model tuned in iBwave with CW test.
- Small Cell design and optimization for High rise building/Tower and Airport.
- Optimized large venue (Commonwealth Stadium) in relation to Neighbor planning, Power, overshooting, SINR, Pilot pollution & traffic load balance among sectors.
- Tweaking performance parameter to meet company's KPI.
- Green Field Design using Atoll, Planet & Mapinfo.
- Performing root-cause-analysis and devising solutions to solve any network and design issues.
- Designed Cellular network for Misericordia Community Hospital, Lamp Site design for KAYE Edmonton Clinic, DAS design for Rogers Place Arena, Edmonton International Airport and Wi-Fi design for Commonwealth Stadium.
- Performing CISCO Wi-Fi Design and Channel Planning using IBwave.
- Conducting Predictive and Active Site Surveys for optimum placement of Cellular antennas /Wi-Fi APs (3702i and Cisco 3850).
- Preparing Pre and Post implementation reports for Wi-Fi network using Air Magnet.
- Performing Wi-Fi /RF Cellular optimization (Cisco Prime Infrastructure) to meet target KPI and ensuring that standards are met.
- Working with Business Teams to identify the requirements for business improvement and preparing plans and design accordingly.
- Gathering information for currently installed systems, suggesting improvements and design and model upgrades using AS-IS modelling, working with business for getting User-Cases and responding by means of process diagrams.
- Reviewing and updating Floor Plans, Infrastructure design drawings using Auto-Cad.
- Working cohesively with assigned resources to validate project requirements, soliciting feedback on best practices, and coordinating activities between multiple stakeholders.
- Ensuring the all-new implementations are integrated well with pre-installed IT network, IT equipment and other clinical systems.
- Monitoring the project's progress against standards, timelines, plans and budget, actively identifying and resolving issues within policies and guidelines.
- Escalating the project issues in accordance to the approved project governance.
- Ensuring all processes (including change management, Data Management, Data Process Modelling) are in place.
- Ensuring adherence to TELUS quality standards.
- Managing the integration of vendor tasks and tracking vendor deliverables.
- Responsible for reporting status, budget and other updates as required to the organization/stakeholders and Leadership.
- Prepare presentations, reports and project updates to communicate with executives and Leadership Team.

Senior Specialist Network Planning and Optimization **2007- 2010**
Etisalat, Dubai, United Arab Emirates

- Implemented HSDPA for Hotspots & Dense Urban Areas.
- Optimized Handover parameters for Inter-RAT, Inter & Intra frequency handovers. Tuned Neighbor list for WCDMA Network
- Generated Reports and Stats for higher management.
- Conducted and lead weekly meetings with Project & Operation Maintenance Center (OMC) to study and optimize the Network.
- Planned RF Network for outdoor and In-Building including Wi-Fi for Dubai Hospital.
- Designed WCDMA network for Dubai Metro project.
- Performed WCDMA Dimensioning for project phase I & II (Dense Urban & Suburban)
- Was Responsible for New Feature Implementation, optimization of existing features, and technical as well as strategic network performance and improvement.

Associated Engineer GSM Planning **2002 – 2006**
ETISALAT, Dubai, United Arab Emirates

- Did Frequency Planning of GSM Sites.
- Performed Troubleshooting RF Problem using TEMS Investigation.
- Analyzed drive test plots to optimize GSM network by using different techniques & cell parameters.
- Carried out Indoor design for high rise towers and shopping malls.
- Handled major Dubai Projects for Coverage & Capacity. Projects includes – Palm Jumeirah, Palm Jebel Ali, Dubai Waterfront, Burj Dubai, Jumeirah Beach Residence.
- Handled major events for coverage & capacity such as Dubai Shopping Festival, GITEX, Horse race world cup & Global Village.
- Attended VIP Customer to solve their complaints related to RF issues.

Junior Engineer Network Planning **1997– 2001**
ETISALAT, Dubai, United Arab Emirates

- Was responsible for Drive Test for new commissioned sites, Expansion of existing sites and updating of Site Database.
- Performed surveys for GSM Sites for new developed areas & Hot spots.
- Plotting of Coverage and Quality plots from MapInfo.
- Attended Customer Complains.
- Handled Site Database on day-to-day basis using MapInfo & Microsoft Access
- Contributed to design/planning teams as a regular part of the job
  Assisted pre-sales team to prepare RFPs and BOQs

EDUCATION

- 3-year Diploma Degree in Electronics Engineering Technology -**1993-1996**
  Mohawk College, Hamilton, Ontario – Canada

- Currently attending New Eastern Mexico (ENMU) to complete my Bachelor's in Electronics Engineering Technology. (Completion date Fall 2022)
  1500 S Ave K Portales, NM 88130 – United States (US)

TRAININGs:

- iBwave Level 3 certification
- CWTS Certification
- Wireworks Certification for Structured Cabling
- HSDPA Course (2008)
- UMTS Overview (2003)
- WCDMA/LTE Cell Planning
- UMTS Cell planning & Optimization, Huawei Technologies Co.
- TEMS Cell Planner, Ericsson Academy - Malaysia
- Cell Planning Principles, Ericsson Academy - Malaysia
- RF Radio dimensioning & Performance Workshop, Ericsson Telecom
- TEMS GSM, Light & Prediction Tools, Ericsson Eri soft
- CME20 Statistics Handling, Ericsson Academy - Malaysia
- ASCOM QVOICE Operator, Abu Dhabi – United Arab Emirates
- GSM overview training, Sharjah – United Arab Emirates

HONORS AND AWARDS

- Certificate of Appreciation for Network Coverage of Metro Project (2009)
- Letter of Appreciation for Phase I UMTS Network improvement (2008)
- Achieved Honors in Electronics Engineering Technology degree (1996).
- DOFASCO Incorporated Award (1997)
- Merit Certificate for gaining 1st place A ‘level (1990).
- 1st Mathematical Olympiad Certificate (1989)
- Pak-Emirates Friends circle Scholarship (1989).

REFERENCES:

Excellent references available upon request