**Joaquin Lewis Frisco TX**

**PROFESSIONAL PROFILE**

* Network Engineer with 20+ years of experience as an OSS/BSS RF Optimization Network Engineer leading high-impact wireless and transport infrastructure initiatives across major telecom carriers.
* Proven track record in managing full project lifecycles — from scope definition and vendor coordination to implementation and optimization — for fiber transport network, 4G/5G RAN, Ethernet backhaul, and OSS/BSS activities, RNC IUCS over IP turnup and conversions, MME adds.
* Adept at driving rehome, migration, and commissioning efforts while aligning stakeholders, mitigating risk, and ensuring on-time, on-budget delivery.
* Hands-on expertise with NetAct, ENM, IP/MPLS routing, and multi-vendor network ecosystems including AT&T, Nokia, T-Mobile, Verizon, Google, and Samsung.
* Certified technical trainer for Fiber backhaul networks and Cellular networks.

**EDUCATION & QUALIFICATIONS**

* Project Manager Certification, Cornell University
* Nokia Certified Technical Trainer 5G Commissioning and Installations.
* Nokia Certified Technical Trainer LTE 4G 600 Air Scale Commissioning and Installations
* Technical Trainer Wire system installer CAT5/CAT6/Power Coax Cable
* Technical Trainer Ethernet Transport Certified Fujitsu Sonet (Fiber Optics) Installations
* Nortel Trainer Ethernet Transport Technical Certified (Fiber Networks) DWDM/OC192 DS1, DS3, OC12, OC48
* Bachelor Telecommunication Management (1998 NC) DeVry University
* Veteran USA Army Tactical Communications Specialist (E4/SPC)s person.

**PROFESSIONAL SKILLS**

* OSHA 30 Certified Card Holder\_OSHA 10 Certified Card Holder
* Samsung RAN MMBS Training Course
* Samsung 4G/LTE 5G Telecom equipment certification
* Fiber Optic Q Scope Testing Course, Atoll, Heikemian, React, DAC 5500 Spirent RFC 2544, Q Scope fiber tester, SQL, Granite Administration
* Fiber Optic Certified Trainer DWDM, SONET/SDH School
* Nokia 5G Cloud Base Training and Integrations Nokia 5G Application Engineer Course 2019 Level 2
* Ericsson EMS 2017-2023\_Nokia NMS 2008 -2023
* (CBRS) Citizens Broadband Radio Service Certified Professional Installer (CPI) 3.5GHz Band 2019
* Nokia Certified 5G Equipment Installation and Commissioning 2019 Level 3- 4 (PTID)
* Nokia Certified Air Scale LTE Installations Commissioning and Integrations Level 3-4 (PTID)
* Nokia Certified NetAct for LTE RL40
* Nokia Field Manager Level 4 LTE Installation and Commissioning Air Scale 5G/LTE 600 | 2018
* PIM testing, Talon View, Cats lite, Wireshark/ TIMS TOMS, QCAT/QxDM Siterra
* CCNA Cisco Course Certification
* Wireless testing, RF lab test equipment (HP) Spectrum Analyzer, Signal/RF generators, Oscilloscope. Anritsu T-Bierd, XCAL, Wireshark MS Project Management, Agile PM Word, Excel, PowerPoint, Visio, Unix/Linus, iBwave

**EMPLOYMENT HISTORY**

**Senior RF Optimization Engineer, Manager Central USA Region**

**American Tower (Contractor WAVSYS 1 year) June 2024 to June 2025**

* Delivered over 134+ successful T-Mobile and Verizon cell site builds using Nokia, Ericsson, and Purcell equipment.
* Streamlined civil and RAN BOM scoping, ensuring 100% material accuracy using RFDS, BOM Automation, Magenta Built, Siterra, and Talon View.
* Reduced delays by leading on-site RFDS reviews, pre-inspections, and post-construction audits, driving faster project closeouts.
* Ensured full compliance with all safety, client, and regulatory standards, resulting in zero safety violations and strong vendor performance.
* Resolved complex field issues in real time, maintaining schedule integrity and building strong relationships with service providers. Regularly visited sites to verify workmanship quality, material compliance, and adherence to project specifications.
* Tracked project milestones via PFA and Site Handler, reviewed civils documentation, and led timely acceptance signoffs.
* Managing vendor selection and material procurement.

**SENIOR RAN Optimisation ENGINEER LEVEL 3**

**KGPCO Summit Supply Groups (24-Month Contract) (AT&T)March 2022- March 2024**

* Performed remote integration, PIM testing, and Scope analysis for 3G/4G/5G AT&T cell sites using Ericsson and Nokia network platforms, specializing in LTE/VoLTE/5G optimization and providing advanced remote support to field engineers.
* Led large-scale 5G projects involving Sub-6GHz, DSS, mmWave, VoNR, NSA/SA, with hands-on commissioning and troubleshooting of BTS, NodeB, eNB, and gNodeB using Nokia NetAct, Ericsson ENM, and BTS tools.
* Adjusted RET tilt setting, locked and unlocked sectors, adjusted the power output on sectors, and mapped RRH
* Improved network performance through targeted KPI/OPI optimization, resolving issues like RACH failures and dropped calls. Performed parameter tuning and remote diagnostics, and developed UNIX shell scripts for automation and fault resolution.
* Conducted network audits and multi-layer optimization (5G/LTE/UMTS). Delivered high-performance Massive MIMO deployments while applying deep expertise in Radio Resource Management (handover, admission, capacity).
* Managed cross-functional planning and deployment in a multi-vendor AT&T environment, ensuring project milestones were met and delivering consistent results in network reliability, performance, and site readiness.

**Optimisation ENGINEER 4G LTE 5G/ FIBER INSTALLATION**

**Samsung (6–8-month contract) August 2020- March 2021**

* Maintained and supported current wireless systems, resolving hardware issues involving both internal and third-party equipment. Collaborated across teams to ensure rapid issue resolution using standardized processes and diagnostic tools.
* Tested and upgraded 4G/5G radio equipment, performing circuit verification and component testing using Ethernet test sets, DVMs, fiber test tools, and spectrum analyzers to ensure optimal system performance.
* Installed and commissioned Samsung DAS systems, including pulling and terminating coaxial, fiber, and power cabling throughout headquarters facilities. Rack-and-stacked servers, routers, switches, and BTS base station equipment.
* Terminated CAT5/CAT6 with RJ45 connectors and constructed Andrew connectors for coax cable runs; installed fiber lines throughout Samsung labs and workspaces.
* Analyzed test engineers' requirements and implemented custom system builds to support lab-based network testing and simulation. Regularly test systems to verify component integrity and minimize downtime.
* Led planning and installation of server and telecom systems, including basic network configuration, OSS deployment, and Unix shell scripting. Maintained lab inventory, managed contracts, and coordinated procurement of components and materials.
* Collaborated with RF and lab teams to build, configure, and test customer-facing systems, supporting integration, acceptance, and performance validation workflows.
* Managed and troubleshot remote radio heads (RRHs) using spectrum analyzers, signal generators, and RF measurement tools to maintain safe environments and adhere to RF exposure and safety compliance standards.

**NETWORK PROJECT MANAGER NEW SITE ROLLOUT**

**GTA Telecom (Direct Hire) | June 2019 –July 2020 (Release due to COVID) LA CA. NV, KS, AR**

* Successfully managed the end-to-end rollout installations of over 1000 cell site operations, supporting up to 20 field engineers, and coordinating schedules and assignments. Managed PO and CO receipts, work order completion, and closeout packages assessment, identifying over $300k in outstanding billing using Salesforce.
* Demonstrated advanced proficiency in Salesforce software for site tracking, field engineer scheduling, and overall project management, including billing POs and COs.
* Coordinated with tower crews and local building managers for efficient civil works and cellular radio equipment installation.
* Supervised timesheets and expenses, ensuring timely progress and regular checks.
* Conducted daily calls with end clients for installation updates, proactively managing project scope changes, identifying potential crises, and devising contingency plans. Provided construction technical expertise, developed detailed Scope of Work (SOW) and Bill of Material (BOM) for each site, and reviewed construction drawings, RFDS, and site close-out packages for accuracy.

**OSP SENIOR TECHNICAL TRAINER 2 4G LTE/ 5G FIBER INSTALL.**

**Nokia (Subcontractor) | January 2018 – November 2019 Plano/Irving, TX**

* Trained over 800 students and field personnel through in-person classroom instruction, online sessions, and on-site training across multiple states, including Washington, Arkansas, New Jersey, Texas, and Arizona. Covered key topics such as 4G LTE/5G Node B integration, fiber FTTN to BBU testing, RFDS form interpretation, and T-Mobile installation and commissioning standards.
* Visited over 150 T-Mobile build sites to conduct quality control (QC) and quality assurance (QA) inspections, ensuring all civil works, installations, and commissioning activities met project specifications. Conducted site audits, final punch walks, and COP (Closeout Package) reviews in collaboration with general contractors and field engineers.
* Developed standardized training content for a team of 7 technical trainers, including instruction manuals, quick reference guides, test formats, and RFDS review procedures. Maintained training records and all supporting documentation on the intranet, ensuring accuracy and compliance with organizational requirements.
* Delivered hands-on instruction on civil works pre-commissioning, integration, and retrofitting FSMF systems to support 2G, 3G, 4G LTE, and 5G (28GHz) deployments. Led online training sessions for subcontractors, project managers, and field force teams performing installations and upgrades on active T-Mobile sites.

**RF ENGINEER LEVEL 2 MICROWAVE DESIGN/SMALL CELL FEMTO/PICO CELLS**

**T-Mobile (Contractor) | February 2017 – August 2017 Frisco TX**

* Designed and scoped microwave and fixed wireless backhaul links, generating accurate BOMs and coordinating equipment delivery for Ceragon and Aviat platforms.
* Led LOS analysis, desktop evaluations, and final design for over 1,200 donor site reviews and 200+ completed links, accelerating deployment timelines.
* Engineered licensed (6–23 GHz) and unlicensed (5 GHz Radwin) microwave paths, performing link budgeting, frequency planning, and site selection support.
* Utilized tools such as SSP (Site Sync Pro), Google Earth, FCC ULS/FAA databases, and Comsearch for regulatory clearance and path validation.
* Managed BOM submissions and PCN requests while ensuring design compliance; performed QA testing on Femto/Pico hardware and optimized GPS package setups to streamline field installs and inventory accuracy, all in adherence to industry standards and safety protocols.

**DESIGN ENGINEER-AAV, OSS/BSS, MICROWAVE & FIBER**

**Shentel Wireless (Contract) | August 2016 – February 2017 Shenandoah VA**

* Designed and deployed point-to-point and point-to-multipoint microwave hops, while overseeing network planning and system implementation across mixed fiber and wireless backhaul environments.
* Analyzed over 2,000 cell sites to assess traffic, capacity, switching, and routing needs, guiding FTTN/FTTP circuit ordering and backhaul optimization.
* Administered and updated Granite Inventory, modeling Layer 2/3 devices and building full circuit paths including DWDM and CWDM links using Ciena 6500 platforms, ensuring accurate representation of logical services over physical Ciena transport nodes.
* Performed circuit grooming and conversions from DS1 to Ethernet, managed migrations to upgraded Ethernet backhaul, and supported BGP, OSPF, MPLS, VPNs, and IPsec across Layer 2/3 architectures.
* Utilized Path Loss, Sierra, Google Earth, Centre Views API, and OTIS for RF and fiber design analysis, while maintaining up-to-date provisioning in EMS and inventory systems.
* Delivered process improvements and supported knowledge sharing initiatives to enhance planning and provisioning accuracy across wireless and fiber domains.

**SENIOR NETWORK TRANSPORT ENGINEER FIBER, MICROWAVE OSS/BSS R**

**T-Mobile (Contractor) | January 2016 – June 2016, Birmingham, AL**

* Deployed and tested AAV-ETH/MLPP and microwave backhaul circuits across the Alabama market, supporting LTE and legacy 3G networks.
* Integrated 10G Ethernet circuits from providers like Verizon and CenturyLink into ALU 7705 SAR routers and validated via Spirent RFC 2544 testing using SAM 5620 to ensure SLA compliance.
* Mapped VLANs and provisioned connectivity between ALU 7750 and 7705 routers, enabling successful base station turn-ups.
* Monitored and troubleshot Ciena 6500/3900 transport nodes for DWDM and Ethernet backhaul performance.
* Interfaced with RNC-524 element manager, configured WCELs/WBTS, and supported Nokia Flexi BTS deployments.
* Worked hands-on with Ciena, Ceragon IP20C, DragonWave HEMC, and ACX2200/4000 radios for diverse backhaul configurations.
* Produced MOPs, test reports, and E911/data/call validation results for site acceptance packages.

**SENIOR UE MOBILE CALL TESTER E-911 INTEGRATIONS/TESTING WITH LOCAL PSAPS**

**Verizon (Contractor) | April 2015 – February 2016 Irving TX**

* Installed and provisioned telecom equipment across the Upper Midwest, completing deployments on time across 30+ sites while ensuring seamless integration with regional network infrastructure.
* Managed E911 call testing and PSAP coordination as the primary point of contact, achieving 100% SLA compliance and resolving service issues proactively with county agencies.
* Led small to mid-sized projects through the full lifecycle—scope, scheduling, budgeting, and vendor coordination—resulting in on-time delivery and 15% under-budget execution across multiple initiatives.
* Collaborated with area managers on annual capital planning and forecasting; utilized PeopleSoft to monitor expenditures, streamline equipment procurement, and secure vendor payments with zero delays or compliance issues.

**LEAD TRANSPORT FIBER OPTIC DESIGN SUPPORT ENGINEER**

**Google (Contractor) | August 2014 – March 2015, Addison, TX**

* Translated raw network element data—including DWDM, CWDM, and single-wavelength architectures—into clean, detailed PowerPoint and Visio diagrams, supporting Google Fiber’s metro and long-haul backbone deployments.
* Mapped end-to-end circuit paths using Ciena 6500 node data, aligning transponder/port assignments, wavelengths, and ROADM routing to validate design accuracy and fiber utilization.
* Authored technical documentation and MOPs incorporating Ciena platform standards, ensuring consistent deployment procedures and streamlined provisioning.
* Interpreted and reconciled network element data to support FTTP, FTTB, and FTTN OSP/ISP builds while reinforcing high-capacity transport layers (OC-192, DWDM, UMTS).
* Improved engineering workflows by producing standardized, presentation-ready designs from unstructured inputs, enhancing communication between design, planning, and field teams.

**OPERATION LEAD NETWORK OPTIMIZATION ENGINEER**

**Samsung (World Link) | May 2013 – August 2014 Frisco TX**

* Commissioned 1900/800 MHz and second-carrier LTE sites, ensuring discoverability and commercial readiness across multiple markets; supported successful LTE/CDMA integration into Sprint's RAN infrastructure.
* Provided Tier 2 technical support for Fiber, TDM, and Microwave (MW) backhaul issues, utilizing tools like ATOLL, CTTP, and E911 testing to maintain service quality in 3G/4G markets.
* Built and executed UNIX shell scripts for ECSFB configuration and live network changes via WinSCP and PuTTY, improving deployment efficiency and reducing manual error during LSMR updates.
* Tracked project milestones using Salesforce, prepared MOPs, and generated outage and KPI reports; enabled rapid restoration of EnodeBs, MMEs, and cell sectors, contributing to network stability and SLA compliance.

**LEAD RAN Optimisation ENGINEER GNOC LEVEL 2 (T-MOBILE LTE MODERNIZATION PROJECT)**

**Nokia (Contractor) | August 2012 – May 2013 Irving TX**

* Provided daily remote support for T-Mobile’s RAN Modernization Project, performing 3G Node-B integrations and remote software upgrades using NSN CM, NetAct, RNC-524, and Flexi BTS site manager.
* Executed Node-B configurations for RBS 3206/3106 and DUW 6601 with RRUS, including hot swaps and site creation/deletion within the RNC; improved deployment accuracy across 100+ sites.
* Created and deployed UNIX shell scripts and SCF files for live network adjustments, enabling efficient power splitting, TMA modifications, and OBIF/RUIF sector reconfigurations.
* Led alarm monitoring and fault management for Nortel/Ericsson 3G Node-Bs, resolving VSWR issues, restarting sectors, and ensuring RBS health, contributing to reduced downtime and faster sector recovery.
* Was responsible for the RNC Deletion-Nokia MGW ATCA-SSG MSC USP configuration, MPLS IP routing, RNC IuCS over IP Re-Grooming-Nokia/Nortel Media Gateway SSG ATCA MSC, VSE parameter change.

**NETWORK ENGINEER OSS/BSS LEAD LTE LTE/MGW DATA TRANSLATIONS ENGINEER LEVEL 3**

**AT&T (Contractor| July 2009– April 2013, Pennsylvania**

* Performed remote Core RAN data translations across multi-vendor environments (Nokia, Nortel, Ericsson, Lucent), supporting Node-B/BSC rehomes, MSC port turn-ups, RNC additions/deletions, and IUCS-to-IP conversions, improving network scalability and reducing integration time.
* Created and executed UNIX shell scripts for live network modifications, batch reconfigurations, and IP routing tasks, contributing to faster provisioning cycles and reduced manual errors.
* Led LTE SMS over SGs integration and MME additions, supported MGW, ATCA, MSC, and SSG configurations, and optimized UMTS/LTE KPI performance through targeted RNC and media gateway changes.
* Developed MOPs, PSAP testing scripts, and E911 call trace procedures; collaborated with RF teams and local PSAPs to validate ESRD/ESRK routing, ensuring 100% E911 compliance and test call success across deployments.

**PROJECT MANAGER, SOFTWARE LAB ENGINEER**

**AT&T (Contractor) | August 2008 – July 2009, Redmond, WA**

* Served as FOA Software Release Lead for Nortel's OMCR-17 OSS platform, managing the successful deployment of the BSS17 software and contributing to on-time delivery of SLA milestones.
* Coordinated cross-functional efforts involving core switching, IPsec, virtualization, and disaster recovery, ensuring alignment with current protocols and business continuity standards.
* Led training sessions and developed MOPs and user documentation, improving team readiness and reducing onboarding time for new engineers.
* Supported project operations and warehouse logistics by tracking deliverables, troubleshooting hardware issues (routers, switches, NICs), and producing client-facing reports in a global delivery environment.

**Lead Technical Training Manager**

**SONET/ ETHERNET TRANSPORT FIBER OPTIC (Contractor) | March 2001– April 02**

* Delivered Telcordia-compliant technical training programs on Nortel and Fujitsu systems, certifying students on MSC 150/250 and DMS family equipment in support of new cellular builds, LTE site prep, and transport system deployments.
* Developed end-to-end training objectives and lab exercises focused on Fujitsu FLASHWAVE platforms (including early 4500/7500 series), covering SONET/SDH, TDM, and optical DWDM architecture for long-haul and metro aggregation networks.
* Authored technical documentation, including Method of Procedure (MOP) manuals, operating guides, and installation procedures used in field deployments.
* Created CBT modules, administered written/practical certification exams, and evaluated technician performance to ensure operational readiness and compliance.

**Lead Technical Trainer**

**SONET/ ETHERNET TRANSPORT FIBER OPTIC| May 1999 – Jan 2001**

* Delivered certified technical training programs to Telcordia standards on Optical (SONET) and Wireless products, preparing field engineers and technicians for real-world deployments.
* Provided instruction on wireless theory and system architecture, including the design and engineering of TDMA, CDMA, GSM/GPRS, and UMTS high-capacity transport networks.
* Created detailed technical documentation, including MOPs, appendices, and O&M manuals, aligned with live network equipment and industry protocols.
* Trained personnel on Nortel’s optical transport systems, including the OPTera Metro 5200, OPTera Long Haul 1600, Common Photonic Layer (CPL), and Passport multiservice platforms, supporting SONET/SDH and early DWDM deployments.
* Developed CBT modules and facilitated SONET onboarding for new hires in network planning, engineering, and installation roles.
* Taught foundational and advanced troubleshooting procedures for maintaining, monitoring, and managing SONET networks, with hands-on training using Nortel’s S/DMS Transport Nodes and Access Node equipment.

**TELECOM SYSTEMS OPERATOR – 31L AND 31D**

**USA Army |**

* The 31D/31L Military Occupational Specialty (MOS) in the United States Army was designated for the position of Tactical Communications Chief.
* Soldiers in this MOS supervised and coordinated the installation, operation, and maintenance of tactical communications systems.
* Responsibilities included overseeing radio and wire communication equipment used for command-and-control purposes in the field.
* Personnel in this MOS trained others in the proper use of communication equipment.
* They ensured the security of communication networks during military operations.