Tier 3 Network Engineer – Position Description

The Lonestar Education and Research Network (LEARN) is a consortium of 41 organizations throughout Texas that includes public and private institutions of higher education, community colleges, the National Weather Service, and K-12 public schools. The consortium, organized as a 501(c)(3), connects these organizations, and over 500+ affiliated organizations, together with high performance optical network services to support their research, education, healthcare and public service missions. LEARN provides Layer 1 and MPLS transport services. It also provides IP connectivity to a global research network through Internet2 and other networks, and commercial Internet services (CIS) to its members.

LEARN operates an advanced high-speed Wide Area Network (WAN) and an ISP environment consisting of fibers, circuits, multiplexers, routers, network switches and servers. It also provides professional services to its customers and members.

Position Location: This position requires the candidate to operate from LEARN-member provided locations or home office in a virtual office environment. Candidate's residence location can be in the Dallas, Austin, or San Antonio Metroplexes or be willing to relocate to meet LEARN's requirements.

Travel Requirements: Travel to LEARN POPs and member locations throughout the State of Texas regularly. Travel to events and meetings outside of Texas occasionally.

Salary Range: Salary commensurate with experience.

Responsibilities and Duties:
- Network architecture, engineering, and operations support for:
    - Regional Wide Area Network
    - Campus Wide Area Network
    - Campus border switching and routing
    - Campus core switching and routing
    - Data Center switching and routing
- Develop routing and switching architectures for campus networks.
- Develop routing and switching architecture for Data Center Networks.
- Develop network capacity plans and prepare augmentation proposals
- Collaborate with member's staff and researchers and document the science and/or business drivers
- Responsible for gathering requirements, identifying solutions, proposing solutions, creating design and budgets, developing project plans, leading teams to implement the design,

engaging in knowledge transfer activities, producing as-built and infrastructure documentations.
- Isolate and diagnose root causes of hardware and software issues/failures. Develop and carry out a plan of action for timely problem resolution.
- Design and implement advanced configuration of network systems, routers, and switches.
- Interact and collaborate with vendors and contractors for product/platform evaluation, technical implementation and planning, and procuring network products and services.
- Develop, implement, and maintain standard operational procedures and established standards.

The individual will work in a small team environment but will have significant interaction with members ranging from K-20, higher education, and others to work on complex enterprise networks. There will be frequent interaction with network, fiber & service providers, with other regional and national networks, with content & cloud providers, and with application & infrastructure providers.

Position Qualifications:
Required Qualifications:
- Bachelor's degree with 9+ years of experience in a related field. Equivalent combination of education, training and/or experience will be considered
- Proven hands-on experience with large enterprise and advanced service provider infrastructures & protocols, including switch and router configurations, BGP in a multi-homed environment, IPv4, IPv6, ISIS, OSPF, EIGRP, MPLS, LACP, LDP, L2 and L3 VPN, VPLS, EVPN, VxLAN, QoS, 802.1q, 802.1p and IP Multicasting technologies
- A working knowledge of cyber infrastructure, networking protocols, with a thorough understanding of TCP/IP, IPv4/v6 address management, and DNS
- Proven hands-on working experience with Juniper platforms (e.g. MX, EX, QFX) is required.
- Proven hands-on working experience with Cisco platforms (e.g. ASR, ISR, CSR, Catalyst) is required.
- Proven hands-on experience with network management and monitoring systems and diagnostic tools commonly used within the enterprise and service provider networks
- Fiber optic wiring and transceiver troubleshooting knowledge
- Skills and knowledge to operate network test equipment and tools
- Proven project development & implementation skills; network documentation experience and skills
- Demonstrated outstanding communication, interpersonal and leadership skills
- Proven and effective organizational and time-management skills
- Demonstrated critical thinking skills to solve complex and logistical issues
- Proactive problem solver
- Proven oral and written communication skills including the use of collaboration suite of tools.

Preferred Qualifications:

- Bachelor's degree with minimum of 9 years of experience working directly with complex network environments
- Professional experience in advanced service provider or enterprise network environments
- Skills to lead the strategy discussions for technology platforms and operational efficiencies
- Skills to translate complex concept for consumption by non-technical groups; develop oral and visual presentations
- Skills to identify, compare, select and implement technology solutions to meet current and future needs
- Skills to track, analyze and monitor technology performance metrics
- Take the initiative in thought leadership, innovation and creativity
- Effective negotiation and vendor management skills
- Current Juniper and Cisco certifications
- Prior experience working with Research & Education (R&E) networks

Work Conditions:
- On-call availability for resolving network emergencies, both during regular and off-hours.
- Emergency on-call availability 24x7x365
- Sitting for extended periods of time
- Driving between POP and member locations would be required; e.g. 6+ hour drive to West Texas POP or member site.
- Dexterity of hands and fingers to operate a computer keyboard, mouse, power tools, and to handle other computer components
- Lifting and transporting of moderately heavy objects, such as, network and power systems hardware

To apply for this job, please submit a cover letter and resume in PDF format to jobs@tx-learn.net with "Tier 3 Network Engineer" as the subject line.