

# **KeystoneREN**

## **Senior Network Engineer**

The Senior Network Engineer position at KeystoneREN provides advanced engineering and operations support for KeystoneREN, the regional research, education and community network. This position will provide technical support for design, monitoring, analyzing, and configuring the regional state-of-the-art telecommunications network and its wide area network connections to national networks, including commercial internet service providers and research and education networks including Internet2 and ESnet. This person must be able to design optically based TCP/IP networks in a multi-vendor environment; quickly identify and solve end-to-end and other network performance problems; capable of using network monitoring and debugging tools and interpreting the results of these tools in order to successfully understand network behavior; and improve network configuration and performance. This position requires an underlying knowledge of network behavior gained through formal engineering/computer science education and experience and ability to apply it to understanding and supporting the overall operation of the KeystoneREN network.

Additional responsibilities associated with the position include: testing and evaluating network hardware and software; developing new network monitoring platforms and analysis tools; and writing network documentation. The position also includes engineering support and leadership on federally funded grants in support of the Pennsylvania Science DMZ activities including DTN node deployment, perfSONAR measurement and monitoring and education of these environments to Science DMZ campus participants. This position will also have regular on-call responsibilities.

### **Qualifications**

Minimum qualifications for this position include a BS in Electrical Engineering, Computer Engineering, Computer Science or related field with an advanced degree preferred; a valid US Driver's license. The qualified candidate should have five or more years experience with operating system (UNIX, Windows, OS-X) environments; network protocols (TCP/IP); network technologies and services such as routing, switching, Ethernet, DNS, SNMP; experience with network equipment with multiple vendors across CWDM/DWDM optical environments; and network diagnostic tools. Understanding of and experience with AI and automation tools to enhance security, visibility and network automation preferred. Experience with federated identity and eduroam is a plus.

### **Working Conditions**

The position is full-time with regular hours Monday – Friday and occasional 24x7 on call hours. Working conditions are primarily remote with occasional travel to site locations for maintenance, installations or client visits. Must have the ability to lift and carry 40 pounds and the ability to stay at a terminal and use a keyboard and mouse for extended periods. The candidate must have the ability to travel to a variety of sites (Pennsylvania

and throughout the US). Periodic weekend or evening work is expected. Candidate must be eligible to work in the U.S.