

# **SOFTWARE ENGINEER**

## **BROADBAND NETWORK SERVICES**

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### **SUMMARY**

This individual will create software tools and applications required for certification of network elements for cable networks. A Software Engineer serves as an individual contributor, advisor, and leader in development and maintenance efforts for the automation of various specifications (e.g. DOCSIS, PacketCable, etc.).

### **FUNCTIONS**

- Design and develop testing applications or simulators based on an understanding of the PacketCable or DOCSIS architecture & protocols. Work with senior technical staff to ensure adequate testability of technical specifications
- Maintain existing test platforms and test scripts, including fixing bugs and extending test platform to include new testing functionality
- Evaluate software tools for use in software development projects or the certification testing programs
- Review test plans; Enable test platform to automate testing of test cases included in the test plans
- Assist in the preparation of the laboratory testing environment. Train and prepare test technicians and lab staff to operate and support new test tools, procedures and equipment to support certification testing initiatives
- Support the preparation of simulation results and other technical information as requested. Assist staff in integrating this information into presentations
- Perform other duties as assigned

### **OTHER**

- Plan for and produce work product of very high quality. Be dependable. Follow-up and take initiative in completing work assignments.
- Treat Board, members, visitors, fellow employees and vendors with professional courtesy. Maintain positive attitude that promotes and enhances the Company's image.
- Work well with others. Cooperate with staff in all departments.
- Maintain, update and improve job knowledge.

- Cooperate with other staff to resolve conflicting work assignments.
- Make appropriate use of CableLabs policies and procedures (See Employee Handbook).
- Make appropriate use of CableLabs safety policies and procedures (See Safety Manual).

#### **REPORTS TO**

Director, Test Development

#### **QUALIFICATIONS**

Bachelors Degree in computer science required. This position requires a strong self-starter that is a fast learner in the areas of protocols and network related technologies. Additionally the candidate should have working knowledge of the following:

- 2+ years of professional experience with 3GL and 4GL programming languages commonly used for software development in computer data networking, test tool development, simulation programs, and graphical user interface programs is required.
- Detailed knowledge of programming - especially Java, C/C++, TCL, PERL, shell scripting - on both PC and UNIX platforms is required. Web-based and XML programming experience, including XSLT Transformation, XQuery, and XPATH a plus.
- Experience with one or more of the following protocols/technologies: DOCSIS 3.0 protocols, Session Initiation Protocol (SIP), SNMP, DHCP, HTTP
- Experience testing data and voice communications and networking equipment in IP environments (VoIP). Familiarity with IP Multimedia Subsystem (IMS) and DOCSIS is a plus.
- Demonstrated knowledge of software engineering life-cycle and current software development methodologies (e.g. Object-Oriented development, n-tier architecture).
- Familiarity with 3<sup>rd</sup> party testing equipment including packet generators and data capturing sniffers is preferred.
- Familiarity with data communications and data networking equipment in a cable TV (CATV) environment preferred.
- Excellent written and oral communication skills

