Job Posting Title

Summer 2016 Coop/Internship Computer Science and IT Majors

Posting Start Date

08/25/2015

Job Title

Summer 2016 Coop/Internship Computer Science and IT Majors

Company

Norfolk Southern is one of the nation's premier transportation companies specializing in freight railroading. We operate approximately 21,000 route miles in 22 states and the District of Columbia, serve every major container port in the eastern United States, and provide efficient connections to other rail carriers. Norfolk Southern has the most extensive intermodal network in the East and is a major transporter of coal and industrial products.

We are a team of more than 28,000 employees working together to maintain our reputation as "The Thoroughbred of Transportation". As an industry leader, Norfolk Southern offers a competitive salary and an excellent benefits package. We are proud to be an equal opportunity employer including veterans and disabled.

Job Description

ENAA (EIS, NSPD, & Accounting Apps)

Responsibilities: Student will be primarily responsible for assisting the team with ongoing non-critical production support issues; however, it's possible that some new development work may be needed as well.

Specific tasks include:

- Assist with back office web development
- Assist with stubbing out application components using .NET
- Assist with writing reports
- Assist with enhancing and customizing existing applications

Required Skills: .NET, C#, WPF

Preferred Skills: SQL, Java, JSP, JavaScript, HTML and C#

Enterprise Wintel Services

Responsibilities: Co-op will provide assistance to EWS team members in any way possible, which may include subjects involving Server Building/Decommissioning, Technical Writing/Documentation, Exchange and Active Directory , Programming Languages, SQL, Virtual Machines and Virtual Applications. The Co-op will also be expected to perform many administrative tasks necessary to the teams continued functioning such as Drive Monitoring, Reporting, Change Management and SharePoint administration..

Skills: Knowledge of MS Office is preferred. Proper experience in a business office or business environment is also preferred. Must be able to interact with both supervision and union-oriented craft employees. Should be willing to study reference materials to resolve problems, make suggestions for improvements, and design projects. Knowledge of programming and machine logic is preferred. Good organizational skills and documentation skills is essential.

Network Systems
Responsibilities: Co-ops will work with multiple individuals in the Network Projects group in an effort to provide voice and data connectivity throughout Norfolk Southern's operating region, assist in the completion of requests for network connectivity, act as a lab assistant for multiple people, and work as needed on projects within the group.
Skills: Students must be effective in working as a team member and independently in a very fast paced environment. Knowledge of LAN/WAN network connectivity, 802.11 wireless, PBX systems, and documentation tools, such as VISIO, WORD, or EXCEL, is desirable.

BI (Business Intelligence) Development and Systems Support
Responsibilities: This candidate will assume responsibility for development of BI-related projects and initiatives using OBIEE and/or Interactive Reporting and supporting the associated production and QA environments.
Skills: Required skills include knowledge of SQL; exposure to a software development methodology. a strong desire to excel and be part of a fast-pace development and production support team; ability to learn quickly and take responsibility to drive problem resolution; high capacity to quickly learn OBIEE and IR reporting tools; very strong analytical abilities and problem solving skills; ability to communicate effectively through oral presentations and written reports; good interpersonal and planning and organizing skills.
Preferred skills include: Unix Scripting; data warehouse design and architecture; experience with BI tools, such as Oracle OBIEE, Cognos, Business Objects and Interactive Reporting (IR), ETL tool (e.g. DataStage or Informatica)

Open Enterprise Services
Responsibilities: System administration support:
•   C/C++, Perl, Scripts
•   Create Visio diagrams of system topology and replication systems
•   Develop Web based applications with Java or PHP
•   Update, revise, create, reformat HTML files for IT Open Enterprise Services documentation web site
•   Assist Linux system administrators with tasks relating to registering and installing Linux servers
•   Collect and present data about Linux servers
•   Work with IT server inventory database
•   Assist in the creation of technical documentation of newly developed systems, to include theory of operation,
•   software abstracts, technical diagrams, etc.
•   Assist in the specification, provisioning, and installation coordination of new systems
•   Additional ad hoc tasks to assist management
•   Create and maintain project plans
Skills: Visio, Java, HTML, PHP, Perl, SQL (preferably DB2, MySQL); MS Office Products; Familiarity with Linux, Apache web server & Tomcat is a plus. Some experience with web development is preferred.

PC/LAN Support
Responsibilities: Students will be responsible for troubleshooting computers and related peripherals running Windows XP

and Windows 7 along with Microsoft Office applications. This involves the imaging, installation and setup of workstation and laptop computers including the Operating System and all desktop applications and printers. Configuration of PCs will also include installation/setup of networking, mainframe emulation software, web browsers, and email clients. Students will work to assist customers in resolution of PC related problems. This includes, but is not limited to; problems with PC based applications, Operating System problems, hardware problems, and general troubleshooting of a customer's PC not functioning properly. Students will also assist customers in configuration/setup of mobile devices including tablets and Smartphones.

Skills: Must be experienced in the use of Windows based computers. Knowledge of MS Office is preferred. Students must be able to interact with both supervision and union-oriented craft employees. Should be willing to study reference materials to resolve problems and make suggestions for improvements.

Positive Train Control

Responsibilities: Student will provide support to Managers, Directors and Team Leads for the Positive Train Control project. The primary assignment will be to support the testing effort for this large transportation project. Student will participate in developing and executing test cases and participate in all steps of test plan development and testing methodology. The student will be involved in the mapping of requirements to test case and well as possible development tasks involving the creation of testing tools and testing automation. Student will be involved in IT Lab testing. In addition to these testing tasks there is also the potential for work in the area of project management and other IT support functions.

Skills: Student must show initiative and be able to work independently. The student must be flexible; must be able to deal with job demands that will change as department's priorities change. The student must also be open to working with new technologies, and have the ability to learn new software processes.   Student must be experienced in the use of PC's as well as software packages such as Microsoft Windows and Office. Proficient in MSWord, Excel, Access, HTML, Java, JavaScript are definite pluses. Students must also demonstrate strong written and verbal communication skills. Exposure to HP Quality Center and VISIO is a plus.

SIMS / CLPS (Strategic Intermodal & Consolidated Locomotive Systems)

Responsibilities: Student will be primarily responsible for assisting the team with ongoing non-critical production support issues; however, it's possible that some new development work may be needed as well.

Specific tasks include:

• Assist with researching production issues
• Assist with enhancing and customizing existing applications
• Assist with QA testing
• Assist with documentation efforts
• Assist with writing reports

Required Skills: Unix, SQL, C, C#

Preferred Skills: C++, Uniface, Java

Content Manager

Responsibilities: Student will work in a programming, staff support role. This position assists teams with programming and support of our technical system software associated with a content management system. Students perform Java and C# programming in the Content Manager area. Student will assist with development and maintenance of applications in support of several business areas. These applications are for use in both a client-server and web environment.

Skills: Must be experienced in the use of PC's and programming disciplines. Knowledge of Java is necessary; similar

disciplines are helpful. Experience or significant coursework in data structures (e.g. stacks, queues, linked lists, advanced sorting algorithms, recursion, pointers, etc). Prefer experience in an office or business environment; should be willing to research reference material to resolve problems, and to make suggestions for improvements based on that research.

Database Systems

Responsibilities:

- Assist Database Administrators with database monitoring and daily maintenance tasks
- Assist Database Administrators with installing or maintaining database or database client software
- Collect, document and present data about databases
- Create Visio diagrams of database and replication systems
- Create and monitor incident and change management tickets
- Additional ad hoc tasks to assist management

Skills: Basic knowledge of DB2 LUW or Microsoft SQL Server or DB2 z/OS DB2 databases; Visio, Excel; SQL

Distributed Systems – Unix/SAN Operations Support

Responsibilities: System administration support:

- C/C++, Perl, Kornshell scripts
- Create Visio diagrams of system topology and replication systems
- Develop Web based applications with Java or PHP
- Develop SharePoint applications
- Update, revise, create, reformat HTML files for IT Unix documentation web site
- Assist Unix system administrators with tasks relating to registering and installing Unix servers
- Collect and present data about Unix servers
- Work with Unix server inventory database
- Assist in the creation of technical documentation of newly developed systems, to include theory of operation, software abstracts, technical diagrams, etc.
- Assist in the specification, provisioning, and installation coordination of new systems
- Assist in cabling for server systems
- Monitor and report computer assets
- Additional ad hoc tasks to assist management
- Create and maintain project plans

Skills: Visio, Java, HTML, PHP, Perl, SQL (preferably DB2, MySQL); SharePoint, MS Office Products; Familiarity with Apache web server & Tomcat is a plus. Some experience with web development is preferred.

Data Warehousing Development and Systems Support

Responsibilities: This candidate will assume responsibility for development of DW-related projects and initiatives using Mainframe & ETL tools and SQL and supporting the associated production and QA environments.

Skills: Required skills include a strong desire to excel and be part of a fast-pace development and production support team; ability to learn quickly and take responsibility to drive problem resolution; high capacity to quickly learn new programming languages; very strong analytical abilities and problem solving skills; ability to communicate effectively through oral presentations and written reports; good interpersonal and planning and organizing skills.

Preferred skills include: Unix administration; data warehouse design and architecture; ETL tool (e.g. DataStage or Informatica), knowledge of SQL, knowledge of IBM Mainframe (e.g. XPTR, JCL, TSO, Zeke, ChangeMan, Cobol);

knowledge of software development methodology.

Data Warehouse Support for Applications Development
Responsibilities: This candidate will work to support a team that has responsibility for Data Warehouse projects and initiatives, focusing on remediation of SSN exposure to end-users, as well as identification and decommissioning of obsolete systems.
Skills: Candidate must have a strong desire to excel and be part of a development and production support team with good interpersonal skills. Required skills include knowledge of relational databases and SQL; high capacity to quickly learn tools used for analysis of data, mainframe ETL processes, and end-user reporting; very strong analytical abilities, problem solving, planning and organizational skills; ability to communicate effectively and produce detailed system and project documentation using Microsoft Office (Excel, Word, Visio, etc.).
Preferred skills include: Knowledge of IBM Mainframe (e.g. XPTR, JCL, TSO, Zeke, ChangeMan, Cobol); knowledge of software development methodology; knowledge of data warehouse design and architecture; experience with database query or ad-hoc reporting tools, such as SQL Assistant and Interactive Reporting (IR).

eCommerce
Responsibilities: Student will be primarily responsible for assisting the team with ongoing non-critical production support issues; however, it's possible that some new development work may be needed as well.
Specific tasks include:
•   Assist with web and mobile application Quality Assurance (QA) testing
•   Assist with creation of application test scripts and use cases
•   Assist with writing reports and other team documentation
•   Assist with enhancing and customizing existing applications
Required Skills: Basic knowledge of 1) QA testing best practices, 2) Application Test Script creation and execution, 3) Microsoft Word and Excel, 4) Good communication and writing skills
Preferred Skills: J2EE, Java, JSP, JavaScript, HTML, SQL Server, SharePoint

Application Analysis
Skills: Candidate must have a strong desire to excel and be part of a development and production support team with good interpersonal skills; very strong analytical abilities, planning and organizational skills; ability to communicate effectively and produce detailed system and project documentation using Microsoft Office (Excel, Word, Visio, etc.).
Preferred skills include: Knowledge of IBM Mainframe (e.g. XPTR, JCL, TSO, Zeke, ChangeMan, Cobol); basic knowledge of data storage concepts including database and flat file structures; high-level understanding of system design and architecture for batch and online processing; ability to interpret technical diagrams and system documentation.
Responsibilities: This candidate will participate in a departmental initiative to decommission obsolete legacy applications. It will involve identification, analysis, and documentation of all associated components for each application, including data, jobs, programs, and reports. The inventory will then be utilized to archive components according to corporate records retention policies.

Work Conditions

Location:
Atlanta, GA

Norfolk, VA

Work Location

GA-Atlanta