Senior HL7 FHIR Programmer/Analyst

A. Candidate Role

- Advanced programming skills in Java and Linux/UNIX.

- Proven organizational, analytical, and creative problem solving skills. Excellent written and oral communication. Ability to prioritize, multi-task, meet deadlines, work independently and in a team-based environment.

Experience:

- Four years technical work experience in a software development environment which included two years experience performing software development.

- Experience with enterprise programming and advanced n-tier (server and client side) application architecture. Experience with relational databases and object-relational mapping.

- Experience creating and consuming HL7 FHIR resources

    o Understand differences between DSTU2, STU3 and R4

    o Active in FHIR developer community including chat.fhir.org, HL7 FHIR connectathons, and/or HL7 FHIR Dev Days

- Experience in a research/analysis environment.

Key knowledge:

- Server- and client-side software development, application servers, relational database environments, and data-driven application methodologies.
- Integration to EHR / EMR systems
- Biology background useful.

Key Skills:

- Java and related technologies: J2EE, XML, Spring, JSP, Javascript, JUnit, JAXB.
- UI/UX – Angular, React, Bootstrap
- Web-based user interfaces: Servlet, JSP, JSF, GWT, JavaScript
- Automated unit testing: JUnit, mock objects
- Object/Relational mapping: JPA, Hibernate
- Web services: REST, SOAP, WSDL, XSD, JAXB, SoapUI, Swagger
- Dependency injection: Spring Framework, Google Guice
- Build and revision control: Maven, Ant, CVS, Subversion
- General design & development: Agile, UML
- Cloud computing – AWS or Azure
- Security – OAuth2, Smart-on-FHIR, Okta, WSO2
- Tools – Git, Maven, Jenkins, Bitbucket, Bamboo
- Python programming language a plus
- Excellent written and oral communications skills required. Ability to prioritize work, multi-task, and meet deadlines.

Education:

- Bachelor's degree in math, computer science, or a technical field that required extensive computer programming as part of the degree program. However, upon evaluation, equivalent related experience and/or education may be substituted for the degree requirement.

B. Job Accountabilities:

1. **Perform analysis and programming as required to satisfy Bioinformatics data requirements:**

   - Work with clients to research requests and define user requirements.
   - Assist in the formulation of system scope, objectives, and design.
   - Assist in the formulation of development schedules for assigned work.
   - Prepare detailed specifications for program modifications and development of new programs.
   - Code and test program changes, enhancements, and new system features as required.
   - Maintain communication with customers to ensure systems meet requirements.
   - Prepare appropriate documentation for all program modifications and new development.
   - Provide services as required using bioinformatics analysis tools.
   - Provide timely and up-to-date status of assigned tasks and identifies problem areas early.
   - Direct and maintain communications with users to ensure that requirements are met during each phase of the development process.
   - Perform Quality Assurance reviews of co-workers program code and program/project outputs as assigned.
   - Prepare effective written and oral reports, and presentations as requested.

The following are ancillary position responsibilities:

- Provide production system support as needed or required.
- Perform other duties as assigned.