

## **GE Healthcare**

MAJORS: Biomedical Engineering, Chemistry, Computer Engineering, Computer Science, Electrical Engineering, Mechanical Engineering, Physics

TITLE: Software Engineer

### **JOB DESCRIPTION:**

This position is part of the leading-edge Compute Systems Team, in the Clinical Software Engineering organization within GE Healthcare Systems. The person in this role will work within the team to develop, deliver, integrate, troubleshoot and sustain the Linux operating systems used in a wide variety of GEHC products.

Duties include (but are not limited to):

- Working closely with systems teams in requirements gathering and software design
- Interacting with global teams to promote consistency and maximize synergies across common software platforms
- Working in an engineering team to develop, test, release and maintain a Linux OS distribution based off open source software.
- Establishing and maintaining collaborative relationships with GEHC product teams for integrating and supporting the Linux OS in our medical products.
- Troubleshooting and solving complex technical problems within the Linux OS, drivers, file systems, communication and associated peripheral devices.
- Learn and maintain a high level of expertise on applicable compute technologies such as, Linux OS, BIOS, memory management, file systems, window managers, HW drivers and display adaptors.
- Leveraging DFR for software, Agile and Lean software development methodologies to drive reliability upstream into the product development life cycle

### **Qualifications/Requirements:**

1. Bachelor's Degree in Computer Science, Electrical Engineering or related computer field
2. 1 year experience in software development
3. Software development cycle and automated testing experience

4. Experience in object oriented design methodology and various programming languages, including C/C++ and Java
5. Working knowledge in configuration management tools such as ClearCase and SVN

Desired Characteristics:

1. Masters Degree in Computer Science, Engineering or related computer field
2. Experience in Linux OS and software installation procedures and technology with the ability to develop Unix/Linux scripting & commands
3. Experience in computer subsystem testing, analysis, BIOS, benchmarking and performance characterization at both the low level and applications level
4. Experience in X-servers and window management system software

TITLE: Systems Engineer I

JOB DESCRIPTION

The Systems Engineer has design responsibility to deliver customer workflow, feature functionality, product quality, reliability, serviceability, manufacturability, regulatory, compliance, and cost. Activities include requirements development, traceability and flow down, architecture / system design and analysis, FMEA, developing/executing System Verification and Validation test procedures, and providing support to manufacturing and field issues.

Essential Responsibilities:

- Providing domain expertise to serve as the main integrator between the hardware and software functions to deliver the best high quality product
- Working across functions and team boundaries to define, design, and implement the next generation of products
- Working with customers, Marketing and field personnel to refine requirements which can be refined by the engineering teams
- Developing methods to quantify subsystem interactions and their effects on image quality
- Delivering and incorporating feedback results into new hardware, software and service specifications

Qualifications/Requirements:

1. Bachelors degree in Electrical Engineering, Biomedical Engineering, Physics, Chemistry or closely related discipline
2. 2 years relevant work experience
3. Proven ability to develop timely and effective solutions for challenging design problems
4. Proficient in the use of software tools for analysis and simulation (MATLAB, etc)
5. Demonstrated ability to pursue tasks to completion
6. Broad exposure to HW/SW/Systems design, and technical depth in one or more engineering disciplines (Electrical, Mechanical, Software, etc)
7. Must be legally authorized to work in the United States full-time
8. Must be willing to work in our [city, state] facility full-time
9. Must submit application for employment through gecareers.com (or COS if internal) to be considered
10. Must be 18 years of age or older
11. Must be willing to take a drug test as part of the selection process
12. Must be willing to submit to a background investigation, including for example, verification of your past employment, criminal history, and educational background

Desired Characteristics:

1. Masters degree in Physics, Electrical Engineering or other closely related fields
2. Excellent verbal and written communication skills
3. Self-starter, energizing, results oriented, and able to multi-task
4. Demonstrated problem solving ability and results orientation

TITLE: Mechanical Engineer I

JOB DESCRIPTION

This position provides mechanical engineering design support for Magnetic Resonance (MR) system components and subsystems. This role requires the interaction with other design engineering teams and functions in order to ensure the product quality goals set forth by the business. This position will be focused in the near term on supporting New Product Introduction (NPI) and Installed Base (IB) support for the Patient Handling and User Interface Sub-Systems of Premium product lines.

Essential Responsibilities:

- Developing innovative designs to meet all requirements for performance, reliability, cost and manufacturability
- Developing engineering design concepts for components and electromechanical assemblies that have challenging requirements for size, precision, reliability and cost
- Leading design visualization efforts with 3D CAD models and essential component and assembly details to explore multiple design options. The ideal candidate will possess experience in mechanical design and analysis combined with a hands-on approach.
- Developing and maintaining mechanical subsystem quality. Leading quality engineering projects that provide imaginative solutions to engineering and customer issues.
- Engaging in all phases of new product introduction: concept, architecture, documentation, design, prototype, test, supplier interfaces, manufacturing introduction and service support
- Identifying and developing new opportunities to leverage Strategic Sourcing objectives and Common Technology initiatives in the modality product line
- Ensuring reliability, performance and delivery through supplier relationships.

#### Qualifications/Requirements:

1. BS in Mechanical Engineering or equivalent (defined as 7 years relative engineering experience)
2. Experience (work or educational background) in machine design
3. Experience with 2D/3D mechanical computer aided design
4. Basic understanding of materials, properties, and manufacturing processes
5. Demonstrated aptitude for design through use of hand tools
6. Must be legally authorized to work in the United States full-time
7. Must be willing to work in our [city, state] facility full-time
8. Must be willing to submit to a drug test, and background check – to include verification of previous employment, criminal history and educational background
9. Must submit application for employment through gecareers.com (or COS if internal) to be considered
10. Must be 18 years of age or older

#### Desired Characteristics:

1. MS in a technology field
2. 3 years experience in mechanical design

3. Knowledge of tolerance analysis to design mechanical parts and systems ranging in size from laptop to hand-held applications
4. Detailed knowledge of both thermoplastic injection molding and sheet metal fabrication processes to assess design and production problems prior to tooling
5. Knowledgeable in fabrication processes for electronic enclosures and harness assemblies
6. Experience in EMC design and test requirements
7. Experience in safety requirements of electronic cabinets
8. Basic understanding of materials properties, and manufacturing processes
9. Experience in thermal/acoustic management of power components
10. Demonstrated capabilities in thermal and/or mechanical simulation
11. Design for reliability experience. Experience with Weibull Analysis and DFR tools.
12. Design for manufacturing experience
13. Demonstrated capabilities in use of 2D/3D CAD tools, with ProE experience
14. Demonstrated program/project planning capability
15. Strong interpersonal and communication skills
16. Demonstrated influencing skills

TITLE: ELECTRICAL ENGINEER

JOB DESCRIPTION

Join a global engineering team utilizing advanced design tools and techniques to develop state-of-the-art CT systems for leadership medical diagnostic imaging systems. The successful candidate will support existing CT systems products and new product development programs with component design, equipment design, engineering analysis, and planning/conducting rigorous reliability and verification tests.

Essential Responsibilities:

Duties include (but are not limited to):

1. Design electrical components for Premium CT Hardware
2. Drive the development of prototypes, performance testing and design documentation
3. Capture electrical design schematic using an ECAD system
4. Review and approve layout done on the ECAD system

5. Work closely with the software team to develop software that works with the boards
6. Developing innovative designs to meet all requirements for performance, reliability, cost and manufacturability
7. Identify, select, maintain, troubleshoot, and upgrade test equipment.
8. Evaluate engineering test plan requests, and determine the best method/approach to achieve results.
9. Run engineering tests, and when needed coordinate resources and equipment needed to run engineering tests
10. Proactively resolve and escalate issues across functions regarding issues found during engineering development and tests.
11. Engage in all phases of new product development, including concept, architecture, documentation, design, prototype, test, supplier interfaces, manufacturing introduction and service support

Qualifications/Requirements:

1. BS in Electrical Engineering
2. 1 or more years of experience
3. Schematic capture experience
4. Practical PWA board bring-up experience
5. Experience with typical electrical test equipment such as oscilloscopes

Desired Characteristics:

1. Board Layout experience
2. Knowledgeable in digital hardware, low voltage analog, and power electronics
3. Background in servo drive controllers and feedback devices
4. Design for reliability experience
5. Design for manufacturing experience
6. EMC compatible design/solution experience
7. Circuit design and simulation tool experience
8. Working experience with PWA/PWB and subsystem design techniques for signal integrity, and EMC Circuit design

## TITLE: Lead Program Integrator II-HC

### JOB DESCRIPTION

The Lead Program Integrator is responsible for driving New Product Introduction program execution for a product. The LPI develops the Integrated Program Plan and ensures that the necessary resources are applied and delivering to plan. In addition the LPI works with a small to mid-sized cross-functional team to ensure product manufacturability, serviceability, safety and quality.

#### Essential Responsibilities:

- Ensuring that the product development process abides to the business Engineering Quality Procedures, Phased Review Discipline and regulatory needs of the applicable markets
- Working with the system, subsystem/platform and service leadership teams to deliver quality products on time, within budget and with the necessary features
- Planning resources and materials for timely NPI program execution
- Working with the functional engineering leadership team to grow functional and domain expertise within the team

#### Qualifications/Requirements

1. Bachelor's Degree in Engineering/Science or equivalent (defined as High School Diploma/GED and 4 years progressive experience as an engineer or scientist within the appropriate field of study)
2. 4 years experience in project leadership within a manufacturing, development or research environment
3. Demonstrated ability to build lasting cross-functional relationships, including strong influential and communication skills
4. Demonstrated understanding/experience with the New Product Introduction (NPI) cycle

#### Desired Characteristics

1. Masters Degree in Engineering (Mechanical or Electrical)
2. Demonstrated applied 6 Sigma competency
3. Demonstrated experience with NPI ISO and regulatory compliance process, design history file and collaterals are in place and current

4. Creative problem solver and solution developer when presented with conflicting requirements, business demands and technical risks/issues
5. Demonstrated skills in proactively identifying, facilitating and driving closure of a product/program
6. Knowledge of GE Healthcare engineering tools and processes (EQPM, ePDM)
7. Attention to detail and ability work independently toward timely completion of a variety of assignments
8. Ability to develop unique concepts/solutions for complex products
9. CT domain knowledge