

Job Description

3D/CAD Software Engineer

About Right Hemisphere

Right Hemisphere provides today's leading end to end 2D and 3D visualization solutions. We help manufacturing companies leverage Computer Aided Design (CAD) data more effectively and communicate technical information, complex support procedures and market products with unprecedented clarity. Our solutions make high-impact, visual communication an affordable reality.

Position Details

Position Title	3D/CAD Software Engineer
Location	Pleasanton, California, USA
Reports To	Vice President Engineering
Direct Reports to this Role	None
Last Revision	July 2008

Key Objectives

To develop and maintain Right Hemisphere's products.

Major Roles and Responsibilities

Core Responsibilities

- Analyze, design and build business/technical solutions that deliver the client's goals and provide our clients with maximum value.
- To assist the Project Leader or Software Development Manager to ensure that projects achieve planned levels of profitability and product quality.
- To design the best solution within project constraints.
- To create detailed design documentation.
- To estimate the time required to implement solutions and to negotiate time frames with the software manager or project leader.
- To analyze the potential changes (change management) required and their impact on existing development.
- To code the software as per the Right Hemisphere Standards from the design.
- To test the software against the requirements and test plans in conjunction with the QA Manager and testing staff.
- To document the software (as appropriate).

Work Practice and Productivity

- To take ownership of agreed personal project objectives, timelines and deadlines.
- To manage assigned work to ensure it is completed on or before time.
- To complete administration tasks within timelines established by the Project Manager.

Quality Assurance

- To assist to define, create and maintain development methodologies, procedures and standards.
- To assure the quality of the final products by establishing and checking technical standards, and by verifying that the products meet the needs of clients.
- To provide quality assurance to colleagues.
- To ensure the software division's methodologies, procedures and standards are adhered to.

Professional Development

- To identify training needs and report to the software development manager.
- To identify skill gaps and attend appropriate training courses to enhance performance in other key areas.
- To understand the applicability of new technologies as they become available.

Relevant Skills, Training and Experience

- **Minimum Requirements:**
 - 3D programming experience
 - DirectX/OpenGL experience
 - CAD package experience and preferably experience writing importers/exporters for CAD software.
 - Working with 3D file format experience
 - BSCS or equivalent

An advantage if you have experience in:

- Coding importers or exporters
- PDM (Product Data Management) / PLM (Product Lifecycle Management) enterprise application experience. Teamcenter, enovia, asset management, etc, experience
- Database and SOAP/XML experience
- 3D Visualization
- Experience with concepts such as measurements, compression, healing, poly reduction, etc. (Siggraph like issues). PMI/GD&T/FT&A experience or an FEA (Finite Element Analysis) background.