

SCIENTIFIC SOFTWARE DEVELOPER
Mountain View, CA

NATURE AND SCOPE OF JOB

Weidlinger Associates Inc has an opening for a well motivated computer scientist in the Applied Science Division (ASD). The chosen candidate will work independently and in teams developing graphical user interfaces, visualization, documentation, tests, and work in all other aspects of scientific code development for both 2D and 3D simulation. In addition, the candidate will have the opportunity to work with programmers, engineers, and other scientists in the development of the commercial PZFlex software package, that enables worldwide engineering groups to virtually prototype new acoustic designs.

ESSENTIAL DUTIES

- Provide software development/computer science support to multidisciplinary teams.
- Manage competing priorities of customers and stakeholders to ensure deadlines are met.
- Identify and capture requirements, design and implement software solutions that are maintainable, extensible, and follow best practices for high performance scientific computing software, working in collaboration with customers and team members.
- Document methods and implementation in developer repository, user manuals, and in informal and formal presentations.
- Maintain and improve existing software, as well as develop new software and supporting scripts.
- Experience working effectively in a diverse development team environment, as well as independently.
- Ability to effectively manage concurrent technical tasks, under demanding timelines to produce deliverables.
- Effective time management, organization, and planning skills.
- Effective verbal and written communication and interpersonal skills necessary to work effectively in a large technical team environment.

ESSENTIAL SKILLS, KNOWLEDGE AND ABILITIES

- MS computer science, computer engineering or related experience.
- Extensive experience with Object Oriented Design and Design Patterns.
- Experience working on scientific computing codes.
- Experience in developing Qt based applications.
- Advanced C and C++ programming skills (templating, inheritance, and polymorphism).
- Knowledge of software code development on Linux and Unix-based platforms.
- Familiarity with numerical software and algorithms.
- Effective analytical, problem-solving and decision-making skills to develop independent and creative solutions to complex problems.

DESIRED SKILLS, KNOWLEDGE AND ABILITIES

- Experience with one or more of the following: VTK, OpenGL, or Standard Template Library.
- Experience programming with Fortran.
- Develop computation models for multiphysics applications and libraries and verify their implementation.
- Familiarity with geometric modeling principles.
- Knowledge of software development paradigms on Windows.
- Experience testing and debugging complex problems on a large code system.
- Experience with software quality best practices.
- Experience with software configuration management tools (CVS, Cervisia & WinCVS).
- Parallel computing experience (familiarity with MPI, OpenMP, and Threading).
- US Citizen would be preferable, but not required.

Enquiries/Resumes to be addressed to Karen Popovich (popovich@wai.com) or faxed to (650) 230 0209