

The HDF Group

Software Engineer



Job Posting

Title Software Engineer

Reports to Senior Technical Staff

Job summary

The Software Engineer develops software for a suite of products that support Hierarchical Data Format (HDF). Our team strives to bring the highest possible performance to users of the HDF software package. Team member responsibilities include enhancement of the HDF library software with additional features such as: sophisticated caching techniques, self-tuning storage optimizations, advanced multi-thread/multi-process/multi-client file access techniques, and cluster and parallel file system interaction. Interest and experience with project management is preferred. Travel to client sites, workshops and conferences may be required.

Essential job functions and key responsibilities

- Assist in the design and analysis of requirements for new features.
- Design and implement HDF library features and tools; fix software bugs in the library and tools.
- Determine code designs and details specific to the outlined scope of work.
- Write requirements and design documents, document code and features, and other reports as needed.
- Provide a strong voice in development/debugging priorities.
- Experiment with new technologies relevant to the area of development.
- Possibly take responsibility for project leadership, including staff supervision, work with customers, and project management.
- Provide user support that cannot be provided by Technical Support staff.
- Increase the popularity and acceptance of the software by supporting quality development, user support and outreach activities.
- Attend technical conferences as requested.
- Assist staff responsible for training users, and as needed, prepare and present demonstrations of the current technology at conferences, workshops and to THG visitors.

Minimum requirements

- A Bachelor degree is required, preferably in computer science, software engineering or in applied sciences and engineering; experience and/or training may be considered depending on the nature and depth of the experience as it relates to current technologies.
- Excellent knowledge of C.
- Experience with operating system or application development on Linux, UNIX, Mac OS/X or Windows.

Knowledge, Skills and Abilities required

- Familiarity and proven expertise in software development.
- Broad practical knowledge of various operating systems.
- Ability to communicate clearly to all types of audiences - from the inexperienced to highly technical users.
- Ability to work on several tasks simultaneously.

- Strong organizational skills.
- Strong oral and written communication skills.
- Self-motivation and creativity.

Knowledge, Skills and Abilities preferred

- Experience working with HDF software including HDF library internals.
- Experience with “agile” software development.
- Experience with software performance evaluation and enhancement.
- Experience with all aspects of the software life cycle.
- Experience programming with C++, Java or Fortran 9x.
- Experience using GNU autotools.
- Knowledge and experience in scientific programming and/or scientific data management.
- Working experience with MPI and MPI-I/O.
- Experience in technical writing.
- Experience in project management.
- Experience with MATLAB.
- Experience working with users.

Problem Solving/Analytical requirements:

- Determine appropriate methods for designing program code for a specific project.
- Determine solutions for higher-level problems involving user requirements.
- Assist in determining appropriate methods for release of software, including scheduling and documentation of the release.
- Provide input for preventing future problems as well as incorporating solutions to current concerns.
- Recommend improvements for techniques, procedures or other aspects of technical development.

To ensure full consideration, please send a letter of application, resume, salary requirements and a list of references via email to: bizoffice@hdfgroup.org by 5 p.m. on November 21, 2008. (PDFs preferred.) If you possess a college degree, transcripts are required (copies are acceptable). Interviews may be conducted before the closing date, although no hiring decisions will be made until after the search has closed.

Disclaimer

The above statements are intended to describe the general nature and level of work being performed by people assigned to this classification. They are not to be construed, as an exhaustive list of all responsibilities, duties, and skills required of personnel so classified. All personnel may be required to perform duties outside of their normal responsibilities from time to time, as needed.

Successful candidates must be documented and provide proof of eligibility to work in the United States.

The HDF Group is an equal opportunity employer.

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