

SOFTWARE ARCHITECT AT THE LABORATORY OF NEURO IMAGING AT UCLA

The LONI Pipeline (<http://cms.loni.ucla.edu/pipeline/>) is a workflow application primarily aimed at neuroimaging researchers tackling some of the most fundamental questions about the human mind. With the LONI Pipeline users can create workflows that take advantage of all the greatest neuroimaging tools available quickly. Leading the development team, you will be charged with designing and implementing the LONI Pipeline and relevant tools, whereby you must gather requirements from all Pipeline users for additions into the code base.

You must establish practices for documentation, web presence, coding and design and meet with other managers and lab director to provide status updates and present future plans. Assisting users in learning to use the Pipeline, you must provide grant updates, acting as liaison between different groups in the laboratory, working with System Administrator to correct Sun GRID Engine deficiencies. It is also important to actively explore new technologies and methods to be used for enhancing the Pipeline. Serving as Collaborator Liaison to integrate software tools into the Pipeline, additional feature requests are considered. Additionally, staffing, Supervision and hiring development positions will be key.

Key Qualifications include:

- Working knowledge of full cycle application development, including requirements, analysis, design, coding, testing, debugging, quality management, change management, project estimating and scheduling, and documentation.
- Demonstrated ability to define and analyze complex technical problems using logical and quantitative reasoning and to solve problems with minimal supervision.
- Demonstrated ability to design and write object oriented and modular, reusable, well-documented computer programs.
- Demonstrated ability to write succinct and high-quality reports, proposals, and technical documentation, and to communicate effectively verbally and in writing.
- Expert knowledge of the Unix operating system and related tools, including 7+ years programming experience using C and/or C++ including library usage, and 2+ years programming with Unix shell scripts, Java, and Python. Experience must include writing and maintaining computer programs exceeding 100,000 lines in size.
- Ability to design and implement graphical user interfaces.
- General knowledge of relational database management systems, including the creation of complex SQL databases and database queries using JDBC and SQL.
- Excellent interpersonal and social skills, including the ability to make group oral presentations.
- Ability to direct assistants and junior programmers, and to train and share programming expertise.
- Ability to lead team and keep morale high even during difficult periods, to balance multiple (possibly conflicting) requirements, to prioritize duties, and to meet agreed-upon deadlines.
- A Master's degree in Computer Science or the equivalent is required.

Duties will include:

- Design, implement, and maintain LONI Pipeline Software, which is a graphical environment for constructing complex scientific analyses of data.
- Lead the development team in designing and implementing the Pipeline project and its relevant tools.
- Gather requirements from all Pipeline users for addition into the code base.
- Establish practices for documentation, web presence, coding and design.
- Meet with other managers and lab director to provide status updates and present future plans.
- Assisting users in learning to use the Pipeline.
- Provide grant updates.
- Acting liaison between different groups in the laboratory.
- Work with System Administrator to correct Sun GRID Engine deficiencies.
- Actively exploring new technologies and methods to be used for enhancing the Pipeline.
- Meet with collaborators to integrate their tools into the Pipeline.
- Help collaborators develop extensions for the Pipeline.
- Establish relationships with new collaborators.
- Recruit, interview, and hire candidates for development positions.
- Assist other managers in assessing interview candidates' technical experience.
- Assign and review the work of other members of the Pipeline team as the team leader.

To apply, please send resume and salary history to the applications@loni.ucla.edu with the subject line "Pipeline Architect." No calls, please.