

**UNIVERSITY OF CONNECTICUT HEALTH CENTER  
JOB OPPORTUNITY  
APPLICATION ARCHITECT  
CENTER FOR CELL ANALYSIS & MODELING**

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**Open To:** The Public  
**Location:** Farmington  
**Job Posting No:** 2013-002  
**Hours:** Monday – Friday, hours to be determined  
**Salary:** To be determined  
**Closing Date:** February 14, 2013

The Center for Cell Analysis and Modeling at the University of Connecticut Health Center is seeking an Application Architect who can provide technical leadership in the continued development of a large scale multi-platform, client-server modeling and simulation application, supporting the Computational Cell Biology research community. The position requires hands on experience and technical leadership in the development of numerical simulation codes, design and implementation of server side technologies and proficiency in multi-platform client technologies.

This position requires strong C++ and Java development skills and sufficient Math and Physics background to work as part of a multi-disciplinary team of scientists and software engineers. In close collaboration with numerical methods experts, you will develop cross platform high performance C++ implementations of numerical methods; requiring the evaluation, integration, testing and extension of complex numerical packages within our existing simulation framework. Migration of simulation codes to new platforms such as general purpose GPU clusters is planned. The candidate must become proficient in the operational details of messaging middleware, database, cluster job management, web application technologies while having a vision for the overall system architecture. Our multi-platform Java/C++ client (Windows, Mac, Linux) features local and remote access to simulation capabilities. Strong user interface design and Swing experience are required. Future client interfaces may include web application technologies (e.g. HTML5, GWT), web services, and mobile technologies.

**Knowledge, Skills and Abilities:**

Considerable knowledge of principles of application development / database management / systems programming / systems integration and decision support; demonstrated expert knowledge in the principles of client server development; knowledge of the principles and techniques of data modeling, including experience with data modeling tools; considerable knowledge of data warehouse extracts, transformation and load procedures; demonstrated expert knowledge of one or query/reporting tools; considerable knowledge of servers; knowledge of computer operating systems; considerable demonstrated knowledge and understanding of internet tools and technologies, including principles of web application development; expert knowledge of Microsoft application development tools and methodologies; considerable demonstrated knowledge of distributed systems architecture, networks, middleware or object-oriented analysis design; knowledge of technology support; considerable knowledge and demonstrated understanding of personal digital assistant (PDA) programming methodologies, knowledge of the strategy, structures, processes, procedures and key technical elements of the enterprise; ability to develop complex systems and module requirements, ability to write and maintain program documents; ability to define strategies and plans for influencing multiple decision makers; experienced in facilitating sessions that address complex or highly sensitive issues; effective communication and interpersonal skills; understands and can explain the interrelationship of multiple concepts and translates these concepts, ideas and situations into clear, understandable and simple terms; ability to understand long-term trends and implications of alternative approaches; ability to articulate technical concepts and ideas in support of process improvement to business partners; knowledge of project management tools with proficiency in their use; supervisory ability.

**General Experience:**

Eight (8) years experience of progressively complex programming, systems analysis and design experience or data management experience in a multi-platform environment. Two years of the general experience must have application architecture responsibilities.

**Substitution Allowed:**

Bachelor's degree in information systems management, engineering or closely related field may be substituted for four years of the general experience.

**Special Requirement:**

- Java
- C++
- Work experience in Java and C++ in a multi-platform setting
- User interface design and Swing experience

**Preferred Requirement:**

- Computer Engineering Degree

**Note:** The filling of this position will be in accordance with reemployment, SEBAC, transfer, promotion and merit employment rules, if applicable.

To learn more about the examples of duties for this position go to <https://jobs.uchc.edu> and reference search code 2013-002.

**Application Instructions:** Interested and qualified candidates who meet the above requirements please apply to: <https://jobs.uchc.edu> and reference search code 2013-002. Cover letter, resume and references may be uploaded at the time you apply on-line.

**UNIVERSITY OF CONNECTICUT HEALTH CENTER  
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**AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER**

The State of Connecticut is an equal opportunity/affirmative action employer and strongly encourages the applications of women, minorities, and persons with disabilities.