UNIVERSITY OF SOUTHERN CALIFORNIA
Research Programmer I
Job Code: 165343

Grade: TJ
OT Eligible: Yes
Comp Approval: 8/28/2008

JOB SUMMARY:
Provides programming support to a research project. Develops and/or adapts computer systems which are complex and very large in scope. Interfaces with researchers to determine system requirements to support research. Designs systems to satisfy their needs. Writes computer programs to meet system design specifications. May work as a team member on very large projects or work independently on projects of lesser scope but which require competency in all phases of programming and analysis. Utilizes creativity and innovation to solve conceptual programming problems raised by cutting edge research.

JOB ACCOUNTABILITIES:

<table>
<thead>
<tr>
<th>*E/M/NA</th>
<th>% TIME</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>______</td>
<td>Develops and/or adapts computer systems which are complex and very large in scope. Interfaces with researchers to identify and determine requirements. Conducts detailed systems analysis to define system scope and objectives and implementation approach. Utilizes creativity and innovation to solve conceptual programming problems raised by cutting edge research.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Participates in research projects. Contributes to research designs, develops prototype implementations, and participates in the preparation of papers describing the research.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Designs, codes, tests, debugs, installs, documents and maintains complex programs.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Assists with developing system definition and architecture. Proposes and evaluates alternative approaches. Prepares general and/or detailed specifications for complex programming systems.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Develops test data, revisions and routines required for program check-out and revision. Ensures procedures are thoroughly tested before release. Writes reports of test results. Detects, defines and debugs programs whenever problems arise.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Prepares system and programming documentation for users and other programmers in accordance with internal and external standards. Trains users and programmers as required.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Reviews the work of other programmers as requested. Gives guidance and assistance as needed.</td>
</tr>
<tr>
<td>_______</td>
<td>______</td>
<td>Stays informed of new developments and technologies by reading journals and other pertinent publications, maintaining contact with vendors, and participating in professional organizations, meetings and seminars. Performs other related duties as assigned or requested. The university reserves the right to add or change duties at any time.</td>
</tr>
</tbody>
</table>

*Select E (ESSENTIAL), M (MARGINAL) or NA (NON-APPLICABLE) to denote importance of each job function to position.
EMERGENCY RESPONSE/RECOVERY:

Essential: ☐ No  ☐ Yes  In the event of an emergency, the employee holding this position is required to “report to duty” in accordance with the university’s Emergency Operations Plan and/or the employee’s department’s emergency response and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed.

JOB QUALIFICATIONS:

Minimum Education:

   Master's degree
   Combined work experience and education as equivalent

Minimum Experience:

   1 year

Minimum Field of Expertise:

   Demonstrated creativity and innovation in solving conceptual programming problems. Competent to work independently on complex programming.

Preferred Experience:

   3 years

Skills: Administrative:

   Communicate with others to gather information
   Coordinate work of others
   Gather data
   Prioritize different projects
   Research information
   Understand and apply policies and procedures
   Write in computer code

Skills: Other:

   Analysis
   Assessment/evaluation
   Conceptualization and design
   Knowledge of applicable laws/policies/principles/etc.
   Organization
   Planning
   Problem identification and resolution
   Teaching/training

Skilled in:

   Applications/systems development methodologies
   Operating systems
   Programming languages
   Software design tools

Skills: Machine/Equipment:

   Computer network (department or school)
Computer network (university)
Computer peripheral equipment
Fax
Personal computer
Photocopier

Supervises: Level:

May oversee student and/or temporary workers.

SIGNATURES:

Employee: ___________________________ Date: ___________________________

Supervisor: ___________________________ Date: ___________________________

The above statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

The University of Southern California is an Equal Opportunity Employer