UNIVERSITY OF SOUTHERN CALIFORNIA

Computer Systems Engineer, Senior

Job Code: 167511

Grade: TM
OT Eligible: No
Comp Approval: 10/1/2008

JOB SUMMARY:
Plans, coordinates and executes research and development of computer-based systems. Collaborates with senior researchers on problems of a diverse scope. Provides innovative conceptual solutions to difficult engineering problems.

JOB ACCOUNTABILITIES:

*E/M/NA % TIME
Applies electrical and computer engineering principles in planning, coordinating and executing research and development activities. Contributes to development of state-of-the-art technology. Develops innovative solutions to complex engineering problems.  
Interacts with peers. Presents at conferences, participates in workshops and collaborates in specific areas of research.  
Writes technical reports and publishes technical papers and articles.  
Provides leadership, guidance and direction to lower level staff.  
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.

*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 experience/education as substitute for minimum education

Minimum Experience:
7 years
Minimum Field of Expertise:

Thorough knowledge of all aspects of computer system hardware and software design and development, laboratory and test procedures and modern system design methodologies. Related industrial experience highly desirable. Excellent understanding of the fundamental concepts of how computing systems are architected, designed, fabricated, tested, and qualified.

Preferred Education:

Doctorate

Preferred Experience:

10 years

Skills: Other:

Analysis
Assessment/evaluation
Communication -- written and oral skills
Conceptualization and design
Interpretation of policies/analyses/trends/etc.
Knowledge of applicable laws/policies/principles/etc.
Lead/guidance skills
Organization
Planning
Problem identification and resolution
Project management
Public speaking/presentations
Research

Skilled in:

Applications/systems development methodologies
Database programming
Engineering software tools
Mathematics
Operating systems
Programming languages
Quality assurance/testing methods, tools and techniques
Software design tools
Technical documentation
Web scripting and programming languages

Skills: Machine/Equipment:

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

Supervises: Level:

Leads employees performing similar work on a project basis.
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.

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