Position: Senior Project Associate (ESMD/ISS)

DEPARTMENT: NASA Project

IMMEDIATE SUPERVISOR: NASA Project Director

POSTING DATE: June 16, 2016

CLOSING DATE: Open Until Filled

SALARY: Negotiable, based on Experience and Qualifications
Full Time
Benefited

EXEMPT STATUS: Exempt

GENERAL NATURE OF POSITION: The Psychology Department at San Jose State University is involved in collaborative research with civil service scientists from the Human-Computer Interaction (HCI) Research group of the Human Systems Integration Division at the NASA Ames Research Center in Mountain View, CA. The research is centered on the design, development, and testing of next-generation mission critical engineering systems. We seek a Senior Project Associate (software engineer) to develop such tools to be used by NASA’s Exploration Systems Mission Directorate in future space launch systems (including launch vehicle, crew exploration vehicle, ground components) and International Space Station (ISS). The team is working through a significant re-architecture that will be the foundation of the ~20 systems supported and continuing work for the foreseeable future.

ESSENTIAL DUTIES & RESPONSIBILITIES:

1. Develop mission planning systems, including web applications for crew activity planning and scheduling and space-to-ground text/multimedia messaging that allows crew members and mission controllers to do constraint-informed re-planning of activities and indicate activity status.
2. Collaborate with designers on the day-to-day software development effort and maintenance operations of the production instances of the Mission Assurance Systems.
4. Handle bug fixes when requested.
5. Work within the Human-Computer Interaction team focusing on mission planning systems and integrated information systems.
6. Deploy and administer installations in the cloud and on standalone servers deployed on field tests.
7. Provide on-call remote technical support, and occasionally on-site technical support, for missions.
10. Develop prototype code to support demonstrations and advanced concepts.
11. Participate in application architecture design and development.
INTERPERSONAL CONTACTS: Reports to the Project Director. Interacts with NASA Ames civil service and Research Foundation staff, including student assistants, on a daily basis.

QUALIFICATIONS:

1) Education and Experience

- BS/BA in Computer Science or related discipline is required.
- A minimum of 10 years’ experience in software engineering, web development, application/server architecture, and mobile applications
- A minimum of 10 years’ experience in on-site support of human and robotic mission operations
- Familiarity and experience in human-computer interaction highly preferred.

2) Knowledge, Skills and Abilities required

a) Ability to develop and deploy database driven web applications in a production environment.
b) Possess a wide variety of problem-solving skills for implementing designs, tracking down bugs, and simplifying operations.
c) Ability to turn design mockups into working software.
d) Possess test-driven development knowledge and familiarity with JUnit and Jasmine
e) Ability to develop Internet and Desktop applications using a variety of frameworks
f) Skilled in using JavaScript, JQuery, UnderscoreJS, D3JS, CSS3, HTML, NodeJS, NAP, ResumableJS, Redis, NGINX, asynchronous UI event handling.
g) Knowledge of WebStorm development environment, Git and GitHub.
h) Knowledge of client-side debugging tools in browsers and server-side debugging tools in WebStorm.
i) Ability and willingness to travel to other NASA centers and some field sites.
k) Familiarity with constraint-based planning, and ideally, temporal constraint networks.
l) Working understanding of networks protocols, ports, implications of clock drift.
m) Basic system administration knowledge for MacOS X and Linux, Amazon Elastic Cloud Computing
n) Ability to organize and analyze data both in reports and in web-based environments.
o) Strong verbal and written communication skills.
p) Ability to work both as a member of a team and independently, as required, including ability to integrate into a culturally and organizationally diverse research and development team
q) Ability to work effectively with quality assurance team members

3) Physical requirements

a) Must be willing to travel domestically and internationally. Approximately four trips per year is anticipated, one involving international travel.
b) This position’s location is the NASA Ames Research Center. Therefore, this employee must meet security qualifications for entrance to the Center.
c) Candidate will be a U.S. citizen or Permanent Resident.

4) Complexity of Duties

Exercise independent judgment in the management and completion of a diverse set of tasks
SUPERVISORY RESPONSIBILITIES:  None, though as a Senior level associate, may be called upon for advice and direction by others.

APPLICATION PROCEDURE
To apply for this position, you may submit a letter of interest and a resume or an application. An application and other information, including the job description, may be obtained from the Research Foundation through its web site at http://www.sjsu.edu/researchfoundation/open/index.html. You may also obtain information in person by visiting the Research Foundation, located at 210 North 4th Street, 4th Floor, San Jose, CA (corner of St. James and North 4th Streets). A formal application for employment will be required of all candidates who are selected for a personal interview. Please address your letter of interest and resume or application directly to:

San Jose State University Research Foundation
Attn: HR/Job Code Sr PA ESMD/ISS
210 North 4th Street
San Jose, CA 95112
E-mail: foundation-jobs@sjsu.edu

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The SJSURF has also implemented California State University Policy Memorandum HR 2015 – 08 (http://www.calstate.edu/HRAdm/pdf2015/HR2015-08.pdf).

A background check (including a criminal records check) must be completed satisfactorily before any candidate can be offered a position with the SJSURF. Failure to satisfactorily complete the background check may affect the application status of applicants or continued employment of current SJSURF employees who apply for the position.