Position: Senior Research Developer – Full Stack

DEPARTMENT: Psychology Department, San Jose State University and SJSU Research Foundation

IMMEDIATE SUPERVISOR: Project Director, NASA

POSTING DATE: December 6, 2017

CLOSING DATE: Posted Until Filled

SALARY: Negotiable, DOQ/E Full time Benefited

EXEMPT STATUS: Exempt

GENERAL NATURE OF POSITION:

Do you want to help support NASA’s missions, but don’t want to go through astronaut training camp? Do you like making a difference in the world and help progress the vision of NASA? 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 development, design and testing of next-generation mission ground-systems for NASA’s space explorations missions. We work for the San Jose State University Research Foundation in a partnership with NASA through grant funding.

We seek a Senior Research Developer (Fullstack) 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 position of Senior Research Developer is a full-stack development position focusing on the re-architecture of our software to make it more robust, scalable, and optimized for our users. You work with other developers, designers, and QA team members to create a critical software system used across NASA and its partners. You’ll be a part of creating and developing a variety of software projects from the planning through implementation stages.

Our work environment is very open, collaborative and welcoming to others. We are a diverse and tight-knit team who enjoys off-site team building events and activities. Having a comfortable environment for everyone is important! Our team values a healthy approach to the workplace (from providing adjustable desks to maintaining a balanced work-life schedule). We believe in a no-status-report, no-metrics policy that just ends up being additional overhead to the staff. You will contribute to our wide diversity of skills and incorporate new ideas into our environment.

ESSENTIAL DUTIES & RESPONSIBILITIES:

1) Develop new core user-facing features for production applications.
2) Collaborate with designers on the day-to-day software development effort and maintenance operations of the production instances of the Mission Assurance Systems.

3) Collaborate across the team to continuously suggest and incorporate process improvements and industry standard applications where appropriate.

4) Lead and participate in regular code reviews and developer training for new front-end technologies.

5) Develop prototype code to support demonstrations and advanced concepts.

6) Resolve bugs and troubleshoot issues as they are identified.

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INTERPERSONAL CONTACTS: Reports to the NASA Project Director. Interacts with NASA Ames civil service and Foundation research staff, including student assistants, on a daily basis. Works daily with the on-site design, QA, and development teams at NASA Ames.

QUALIFICATIONS:

1) Education and Experience

Requirements:

   a) BS/BA in Computer Science or related discipline
   b) At least three years of experience supporting software in a production environment.
   c) At least three years of fullstack development experience.
   d) Experience in deploying new production web applications/server architectures.
   e) Experience in data integration utilizing web services and APIs (e.g. REST, SOAP) to either exchange information or create integrated reports.
   f) Experience with contributing to software design and development teams.
   g) Experience in all phases of the development lifecycle including deployment is preferred.
   h) Experience working with design and UX teams is preferred.

2) Knowledge, Skills and Abilities Required

   a) Ability to develop and deploy database driven web applications in a production environment
   b) Ability to develop using a variety of frameworks (e.g. LAMP stack)
   c) Knowledge of multiple JavaScript frameworks (Node + Express, AJAX, jQuery, React + Redux) with demonstrated expertise in at least one (preferably React + Redux)
   d) Experience with JavaScript/CSS build processes such as Webpack, Grunt, Gulp, or Browserify
   e) Knowledge of automated testing suites such as Mocha and Selenium.
   f) Ability to optimize code, benchmark performance, and systematically analyze areas for improvement
   g) Ability to organize and analyze data both in reports and in web-based environments
   h) Ability to speak and write effectively
   i) Ability to integrate a culturally and organizationally diverse research and development team
   j) Ability to work effectively with quality assurance team members to create test plans

Desired/Optional Knowledge, Skills, Abilities

   a) Exposure to relational databases (MySQL) and query statements
b) Familiarity with Linux environments such as RedHat Enterprise
c) Exposure to working with servers like Tomcat and Apache
d) Knowledge of light scripting in Perl or Python languages
e) Exposure to high-availability and cloud environments
f) Enzyme testing framework experience

3) Physical Requirements

a) Occasional travel to other NASA sites may be required.
b) Located at NASA Ames Research Center. Therefore, the employee must meet security qualifications for entrance to the Center, including an Agency background check.
c) Employee must be a US citizen or Permanent Resident
d) The location is equipped for full accessibility

4) Complexity of Duties

Must be able to exercise independent judgment in the management and completion of a diverse set of concurrent tasks, including leading specific development efforts.

BENEFITS

The comprehensive benefit package includes:

a) Nine Health Insurance Plans to choose from
b) Free dental and vision for employee and family
c) Paid Federal & State Holidays
d) Retirement Plan: 403 (b) employee contribution plan component and a 403 (b) employer contribution component
e) Vacation and separate sick plans
f) Employee Discounts
g) Paid Training and Conferences
h) Increases based on merit (performance)

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 SRD-FS
210 North 4th Street
San Jose, CA 95112
E-mail: foundation-jobs@sjsu.edu

Research Foundation employment is separate and distinct from San Jose State University or State of California employment. Research Foundation employees are not employees of either SJSU or of the state of California.

The San Jose State University Research Foundation (SJSURF) is a non-profit auxiliary of San Jose State University. SJSURF is totally self supported. The majority of the organization’s funding comes from the
federal government, and other public and private entities. With annual revenues totaling over $65 million, programs managed through SJSURF cover a rich diversity of applied research, public services, and educational related activities.

SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION

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The SJSURF has implemented California State University Executive Order 1083 (http://www.calstate.edu/eo/EO-1083.pdf). By policy, all SJSURF employees are mandated reporters for suspected child abuse or neglect and are expected to undergo formal training in accordance with the directives of the Executive Order.

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.