San Jose State University Research Foundation

Position: Research Associate (Database Support)

DEPARTMENT: Research will be done under the offices of the Psychology Department at Jose State University

IMMEDIATE SUPERVISOR: Project Director, NASA program

POSTING DATE: 5/7/2019

CLOSING DATE: Posted Until Filled

SALARY: Negotiable based on experience, DOQ/E Full time Excellent Benefits

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? We are a group of developers and designers working in contract with NASA under the Human Computer Interaction (HCI) Research Group to make Mission Assurance Software. We work for the San Jose State University Research Foundation in a partnership with NASA through grant funding. The research is centered on the development, design and testing of next-generation mission ground-systems for NASA’s space explorations missions. You will work with people across NASA, hear about upcoming missions and how we help support them.

The position of Research Associate (Database Support) focuses on keeping our platform up at all times for critical space missions. In addition, you will focus primarily on MySQL high availability implementation and support. This includes configuration of ProxySQL, Orchestrator, and optimization recommendations. On-going work will focus on the database abstraction layer to support our applications and upcoming projects. Your experience will guide us to the next level of high-availability and performance as we grow as a team and provide our HCI research-based software to NASA. With expertise in critical environments, you will advise us on ways to accomplish our production goals and give our users a seamless experience.

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. We believe that 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. You will contribute to our wide diversity of skills and incorporate new ideas into our environment.

ESSENTIAL DUTIES & RESPONSIBILITIES:

1) Troubleshooting and monitoring production database systems to ensure the highest uptimes are maintained.
2) Support and improve upon existing high-availability architecture solutions.
3) Maintain health and availability of the Percona (MySQL) databases, ProxySQL, and Orchestrator.
4) Other duties as assigned.
QUALIFICATIONS:

1) **Education and Experience**
   a) A Bachelor’s degree, or equivalent experience, in related field such as Computer Science required.
   b) A minimum of three years direct experience supporting and designing databases in a high-availability environment.
   c) At 3 years of experience with supporting MySQL high-availability (master/slave relationships) with automation tools.
   d) At least 3 years of experience with scripting languages for task automation (Perl, Python, etc).
   e) At least 3 years of experience using monitoring tools to track health status and alerting like Splunk, IDERA, or other software.
   f) At least 2 years of experience with some type of proxy software for high availability.

2) **Knowledge, Skills and Abilities:**

   **Required**
   a) Good working knowledge of Linux-based operating systems like RedHat Enterprise (RHEL7), or CentOS.
   b) Ability to logically troubleshoot through problems to identify the root cause in time-sensitive situations.
   c) A positive attitude and willingness to help others and stay on top of new technologies is highly valued.
   d) Ability to problem solve with a team and develop creative solutions based on your experiences.

   **Desired:**
   a) Technical writing, including the ability to document processes and create diagrams for presentation of ideas.
   b) Exposure to the AWS platform.
   c) Familiarity with DNS load-balancers such as F5 BIGIPs (GTM)
   d) Security-minded and exposure to standards organizations like NIST.

3) **Physical requirements**
   a) Occasional travel to other NASA sites may be required.
   b) Flexibility to work altered schedule to correspond to major deployment times and occasional after-work time if critical outages occur. (This is very minimal/infrequent).
   c) Located at NASA Ames Research Center. Therefore, the employee must meet security qualifications for entrance to the Center, including an Agency background check.
   d) Employee must be a US citizen or Permanent Resident.
   e) The location is equipped for full accessibility.
   f) This is a local position on-site at Moffett Field and not a remote position.

4) **Complexity of Duties**
   Exercises independent judgment in the management and completion of a diverse set of tasks.
5) **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)

**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.

**SUPERVISORY RESPONSIBILITIES:**
No formal responsibilities, though will be called upon for advice and direction by others.

**APPLICATION PROCEDURE**
To apply for this position, an applicant must submit a formal application for employment, as well as a resume and a cover letter. The applicant may do this via e-mail or by regular mail. The formal employment application is located at [http://www.sjsu.edu/researchfoundation/open/Employment%20Application%20Form_new.pdf](http://www.sjsu.edu/researchfoundation/open/Employment%20Application%20Form_new.pdf)

It may also be obtained from the Research Foundation through its web site at [http://www.sjsu.edu/researchfoundation/open/index.html](http://www.sjsu.edu/researchfoundation/open/index.html).

An applicant may also apply 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). Please address your formal application, your resume and your letter of interest directly to:

San Jose State University Research Foundation  
**Attn: HR/Job Code RA Database Support**  
210 North 4th Street  
San Jose, CA  95112  
E-mail: foundation-jobs@sjsu.edu

**Reasonable Accommodation:**
The San Jose State Research Foundation is committed to providing access, equal opportunity and reasonable accommodation for individuals with physical or mental disabilities in the employment, recruitment, examination, hiring and interviewing processes. If you are a job seeker with a physical or mental disability and require a reasonable accommodation to search, apply, or interview for a job opening or otherwise need a reasonable accommodation during the application and hiring process, please contact us at foundation-jobs@sjsu.edu. In the email message, please indicate your full name, phone number and the type of assistance required. You must not reveal the underlying medical reason for your needed reasonable accommodation or otherwise disclose confidential medical information. You may also call (408) 924-1400 from 8:00am to 5:00pm (PST), Monday through Friday, excluding holidays, to get assistance.

The Research Foundation provides excellent benefits package to benefited employees. Please visit [http://www.sjsu.edu/researchfoundation/humanresources/benefits/index.html](http://www.sjsu.edu/researchfoundation/humanresources/benefits/index.html)
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 is an Equal Opportunity Employer and does not discriminate on the basis of race, color, creed, gender, religion, marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition, sex, genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

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.