Position: Research Associate (AOL)

DEPARTMENT: Research will be done under the auspices of the Psychology Department at San José State University

IMMEDIATE SUPERVISOR: Program Director, NASA program

POSTING DATE: June 5, 2020

CLOSING DATE: June 12, 2020

SALARY: Negotiable, DOQ/E Fulltime (100%)

BENEFITS: Exceptional benefits for employees and eligible dependents: 10 Company subsidized CalPERS medical selections, 3 PPO’s and 7 HMO’s; company paid dental and vision insurance for employees and eligible dependents; Life, AD&D, and LTD coverage; paid federal and state holidays; a 403 (b) retirement plan with a 7% employer retirement contribution following 1 year of benefited employment, which vests immediately; vacation accruals and a stand-alone sick leave hours accumulation; and a subsidized post-retirement medical insurance plan for eligible employees. Annual merit increases (based on performance, as budgets allow).

EXEMPT STATUS: Exempt level

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 want to help progress the vision of NASA?

The Department of Psychology at San José State University is involved in collaborative research with civil service scientists from Airspace Operations Laboratory in the Human Systems Integration Division (HSID) at the NASA Ames Research Center in Mountain View, CA. We seek a Research Associate to collaborate on and engage in human factors activities to further NASA’s aeronautics research.

Our work environment is very open, collaborative and welcoming; we are a diverse and tight-knit team that enjoys off-site team building events and activities. We believe that fostering a comfortable workplace for everyone is important! Our team values a healthy approach to our work, 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. You will work with people across NASA, hear about upcoming missions and how we help support them.
ESSENTIAL DUTIES & RESPONSIBILITIES:

1. Plan, develop, and participate in the conduct of research and simulations, which include both laboratory and field-oriented approaches for the AOL’s aeronautics projects.

2. Effectively communicate, explain, and discuss the interactions between ongoing research objectives and current-day air traffic control to study participants, subject matter experts, and laboratory visitors.

3. Collaborate with fellow researchers to prepare, conduct, and analyze experiments relating to the use of software tools in aeronautics research activities.

4. Maintain familiarity and expertise with the NASA ARMD research portfolio.

5. Manage data reduction and preparation for subsequent analyses of the simulation results.

6. Support and conduct statistical analyses on simulation data.

7. Author and/or co-author publications related to the simulations conducted in the AOL.

8. Present findings at the various conferences held throughout the year.

9. Other duties as assigned.

INTERPERSONAL CONTACTS:

1) Reports to the Program Director.

2) Interacts with NASA Ames civil service and Foundation research staff, including student assistants, on a daily basis.

SUPERVISORY RESPONSIBILITIES:
None, though may be called upon for advice and direction by others

QUALIFICATIONS:

1) Education and Experience
   - MA/MS in Human Factors, Experimental Psychology, or related field required within 6 months of being hired.
   - Experience as a member of a research team conducting research on aviation human factors, including unmanned aircraft systems (UAS), UAS air traffic management (UTM) is required. Candidates with this experience, who have BA/BS degrees in the aforementioned fields may also apply for this position.

2) Knowledge, Skills, Abilities Required
   
a) Good understanding of the basics of conducting human factors and engineering psychology research (specifically human-centered research and evaluation, data collection and analysis, graphic display of data, and technical writing).
   b) Knowledge and capabilities to apply human factors engineering principles, standards, and design guides to the design, test, evaluation, and operation of systems.
   c) The ability to define and analyze human factors requirements and human-human, human-system, and human-computer interactions, evaluate human-centered technologies, and develop system concepts, designs, and prototypes.
   d) Expertise in civil aviation operations, especially air traffic management, air traffic control, and flight-deck operations.
Knowledge of hardware and software human-interface design principles, modalities (e.g. physical, visual, auditory), methods (e.g. field studies, analysis, modeling, prototyping, laboratory experiments, simulations, mockups, database reviews), and tools.

Experience with substantial data reduction and data mining, as well as post-processing of data via statistical and quantitative analysis.

Excellent written and oral communication skills.

Ability to work effectively and efficiently in culturally and organizationally diverse research teams.

Strong interpersonal skills required.

3) **Complexity of Duties**

- Ability to proficiently use computers configured to simulate a real-time aviation environment.
- Highly organized, able to think critically, with solid analytical skills and problem-solving abilities.
- Extremely self-motivated; able to find opportunities for improvement and tackle them without external direction.
- Capacity and willingness to adopt new methodologies and skills in line with core responsibilities.

4) **Physical Requirements**

- This is a local position on-site at Moffett Field and not a remote position.
- Located at NASA Ames Research Center. Therefore, the employee must meet security qualifications for entrance to the Center, including an Agency background check.
- Employee must be a US citizen or Permanent Resident.
- Frequent and ongoing use of a computer terminal to conduct a variety of tasks.
- Strength, dexterity, and coordination and/or ability to use a computer keyboard and read a video display terminal on a regular basis.
- Work with time constraints and under pressure.
- NOTE: The location is equipped for full accessibility.

**NOTE:** This position description intends to describe the general nature and level of work being performed by people assigned to this job. It is not intended to include all duties and responsibilities. The order in which duties and responsibilities are listed is not significant.

**BENEFITS:**

The comprehensive benefit package includes:

- Ten company subsidized CalPERS health insurance plans to choose from (employee contributions differ according to plan and level of coverage)
- Employer paid dental and vision for both employee and eligible dependents
- Life, AD&D, LTD with supplemental coverage opportunities
- 13 paid Federal & State Holidays
- Retirement Plan: 403 (b) employee contribution plan component and a 403 (b) employer Contribution component following one year of benefited employment, which vests immediately
- Vacation hours accruals and separate sick hours accumulations.
- Budget allowing, merit increases based on performance.
- Employee Discounts
**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 may be obtained from the Research Foundation through its website at [https://www.sjsu.edu/researchfoundation/employees/recruitment/index.php](https://www.sjsu.edu/researchfoundation/employees/recruitment/index.php).

Due to the COVID-19 health crisis, all candidates must submit their application materials via the foundation-jobs@sjsu.edu email address.

Please address your formal application, your resume and your letter of interest directly to:

San Jose State University Research Foundation  
Attn: HR/Job Code NASA RA (AOL)  
E-mail: foundation-jobs@sjsu.edu

**Reasonable Accommodation**

The San José 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.

The Research Foundation provides excellent benefits package to benefited employees. Please visit: [https://www.sjsu.edu/researchfoundation/employees/benefits/index.php](https://www.sjsu.edu/researchfoundation/employees/benefits/index.php) to get more details.

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.