Position: Senior Project Associate (HITL)

DEPARTMENT: Psychology

IMMEDIATE SUPERVISOR: Project Director, NASA program

POSTING DATE: September 20, 2017

CLOSING DATE: Posted Until Filled

SALARY: Commensurate with degree and experience
        Full time
        Benefited

EXEMPT STATUS: Exempt

GENERAL NATURE OF POSITION:

The Psychology Department at San José State University is involved in collaborative research with civil service scientists from the Airspace Operations Laboratory (AOL) of the Human Systems Integration Division at the NASA Ames Research Center in Mountain View, CA. The research is centered on the Integrated Arrival, Departure and Surface (IADS) systems and will be conducted in the Airspace Operations Laboratory and in the field. We are seeking an individual with knowledge and experience in air traffic management research to participate in the conduct of field evaluations and Human-In-The-Loop (HITL) simulations.

ESSENTIAL DUTIES & RESPONSIBILITIES:

1) Collaborate with fellow researchers to prepare, conduct, and analyze field data collection and experiments related to air traffic control and ramp operations.
2) Collaborate with subject matter experts, and operational stakeholders to develop relationship and software requirements.
3) Develop and design HITL simulation requirements and metrics for IADS concepts.
4) Collaborate on developing and testing simulation traffic scenarios.
5) Maintain relationship and currency with the operational trends and research findings within the airspace operations domain.
6) Contribute to the development of prototypes and enhancements of Multi-Aircraft Control System (MACS).
7) Support the development and preparation of publications to be presented at various conferences held throughout the year.
QUALIFICATIONS:

1) Education and Experience
   a) M.S./M.A in Human Factors, Psychology, Engineering, or related field is required.
   
b) Minimum of five years of demonstrated experience in air-traffic simulation and research.

2) Knowledge, Skills and Abilities required
   a) Familiarity with air traffic operations, IADS, or metroplex concepts.
   b) Experience with conducting HITL simulations with human participants.
   c) Experience in human-automation interaction research and development.
   d) Experience with conducting surveys and field evaluations.
   e) Experience with analyzing large data.
   f) Knowledge of cognitive modeling and user interface design.
   g) Knowledge with software development process.
   h) Ability to proficiently use computers configured to simulate a real-time aviation environment.
   i) Experience with managing relationships with customers.
   j) Ability to effectively communicate through verbal and written correspondence with outside contacts including other NASA research labs, FAA partners, air traffic and ramp control operators, commercial airline representatives, as well as simulation participants.
   k) Ability to simultaneously work independently and as a team member on several tasks within the project.
   l) Knowledge of or willingness to learn the Python programming language.

3) Physical requirements
   a) Must be willing to travel domestically and internationally.
   b) Located at the NASA Ames Research Center. Therefore, the employee must meet security qualifications for entrance to the Center.
   c) Employee will be a US citizen or a Permanent Resident.

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

INTERPERSONAL CONTACTS:

Reports to the Project Director. 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.
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 SPA HITL
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.