SJSU | RESEARCH FOUNDATION

Position: Project Associate (Airspace Operations)

DEPARTMENT: Psychology
IMMEDIATE SUPERVISOR: Project Director
POSTING DATE: 
CLOSING DATE: 
SALARY: Negotiable, DOQ/E Benefited
EXEMPT STATUS: Exempt level
APPOINTMENT: Full-time

GENERAL NATURE OF POSITION:

The Psychology Department at San Jose State University is involved in collaborative research efforts with civil service scientists from the Human Systems Integration Division at the NASA Ames Research Center in Mountain View, CA. The research is centered on Airspace Systems and will be conducted in the Airspace Operations Laboratory (AOL). We are looking for a Project Associate to investigate the roles, responsibilities and requirements for human operators and automation in future air traffic management systems. We are seeking an individual with knowledge and experience in air-traffic operations research to participate in the conduct of demonstrations/simulations to test concepts, technologies, and/or procedures for improving air traffic operations in the US National Airspace System (NAS).

ESSENTIAL DUTIES & RESPONSIBILITIES:

1. Collaborate with fellow researchers to prepare, conduct, and analyze experiments for advanced air traffic operations simulations.
2. Participate in designing effective human-in-the-loop (HITL) simulation requirements and metrics for Next Generation Air Transportation System (NextGen) concepts.
3. Collaborate on developing and testing simulation air traffic operations scenarios.
4. Analyze results from experiments investigating future air traffic control concepts.
5. Maintain currency with the current operational trends and research findings within the airspace operations domain.
6. Participate in projects contributing to development and enhancement of Multi-Aircraft Control System (MACS).
7. Support the development and preparation of publications related to the experiments performed in the AOL to be presented at various conferences held throughout the year.
QUALIFICATIONS:

1) Education and Experience
   a) BS/BA in Human Factors, Psychology or related field required.
   b) Minimum 6-12 months’ experience in airspace operations concepts and research required.
   c) Minimum 1-3 years’ experience in behavioral and social science research, including advanced coursework in experimental psychology, statistics, and research methodology required.

2) Knowledge, Skills and Abilities required
   a) Familiarity with air traffic operations and proposed concepts for NextGen.
   b) Understanding of and interest in learning about the roles, responsibilities, tools and procedures used by the humans within air traffic operations and the possible consequences of changes to those elements within their working environment.
   c) Familiarity with relevant human performance measures in air traffic operations and methods for their collection and evaluation.
   d) Experience working on HITL simulations to study air traffic operations concepts.
   e) Experience conducting research with human participants.
   f) Comfortable learning a complicated hybrid simulation platform that has multiple hardware and software components; ability to work within that setting to develop and assemble novel, custom simulation environments to prototype and test new operational concepts.
   g) Interest in both the technical and socialoperational aspects of air traffic operations.
   h) Ability to use computers configured to simulate a real-time aviation environment.
   i) Ability to simultaneously work independently and function effectively within a team environment; show flexibility and willingness to take on novel responsibilities, provide support to and seek support from other team members
   j) Demonstrated excellent communication skills (speaking, writing).

3) Physical requirements
   • Some travel required (approximately three trips per year to professional conferences/meetings, other NASA Centers, etc.).
   • Located at the NASA Ames Research Center. Therefore, this employee must meet security qualifications for entrance to the Center.

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 Foundation research staff and civil service staff on a daily basis.

SUPERVISORY RESPONSIBILITIES:  None

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 PA ASOps
210 North 4th Street
San Jose, CA 95112
E-mail: foundation-jobs@sjsu.edu
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SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION

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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.