Position: Senior Project Associate (ADD)

DEPARTMENT: Psychology

IMMEDIATE SUPERVISOR: Dr. Kevin Jordan

POSTING DATE: August 8, 2016

CLOSING DATE: August 18, 2016

SALARY: Commensurate with degree and experience
Full time
Benefited

EXEMPT STATUS: Exempt

GENERAL NATURE OF POSITION:

The Psychology Department at San Jose State University is involved in collaborative research efforts with civil service scientists from the Aeroflightdynamics Research Group at the NASA Ames Research Center in Mountain View, CA. The research is centered on several exciting new programs in unmanned rotorcraft systems. We seek a Senior Project Associate who will work on the Quadrotor Guidance, Navigation and Control (Unmanned Rotorcraft) project in the US Army Aviation Development Directorate (ADD) Vehicle Management & Control Technical Area at Ames Research Center in collaboration with other researchers in ADD. In addition, we seek a Senior-level Associate who has the ability to establish an independent research program within the above area.

ESSENTIAL DUTIES & RESPONSIBILITIES:

- Develop infrastructure for the initial fly-off demonstration, including set up of the computer station with supporting software to allow real-time overlaying of planned trajectories and actual flight path and identifying test area.
- Participate in the development and validation of the Hardware-in-the-Loop system
- Support research and development of scaling method and scoring metrics
- Participate in hover and forward flight system identification while operating the quad UAS
- Support the disturbance rejection bandwidth study and develop indoor/outdoor 'turbulence arena'
- Produce reports (whole or in part) and present work to relevant audiences.
QUALIFICATIONS:

1) Education and Experience
   • MS in Aerospace Engineering or related field required.
   • Education in the following areas: aerospace flight dynamics and control; aircraft simulation; classical control (transfer functions, frequency responses, root locus); linear control theory -- state-space methods; MATLAB
   • Experience in applied research setting is highly desired.

2) Knowledge, Skills and Abilities required
   • Strong verbal and written communication skills.
   • Ability to work both as a member of a team and independently as required.
   • General knowledge of flight control, airspace operations, and fixed/rotary wing aircraft and UAV controls.
   • Demonstrated ability to conduct independent research
   • Excellent understanding of experimental design and statistics.
   • Good understanding of the basics of modeling, flight testing, and simulation environments

3) Physical requirements
   • Must be willing to travel domestically and internationally.
   • Located at the NASA Ames Research Center. Therefore, this employee must meet security qualifications for entrance to the Center.
   • Candidate will be a U.S. citizen or Permanent Resident.

4) Complexity of Duties
   • Exercise 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:
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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.