Position: Senior Project Associate (FVL)

DEPARTMENT: Psychology

IMMEDIATE SUPERVISOR: Dr. Kevin Jordan

POSTING DATE: March 1, 2016

CLOSING DATE: March 16, 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 on future vertical lift (FVL) rotorcraft systems. We seek a Senior Research Associate who will work on these programs in conjunction with other researchers in the Aeroflightdynamics Group. In addition, we seek an Associate who has the ability to establish an independent research program within the above area.

ESSENTIAL DUTIES & RESPONSIBILITIES:

1) Develop modeling effort to support the Army’s FVL flight control and handling qualities research.
2) Model will encompass the full flight envelope and include flexible rotor blades and fuselage.
3) Validate model against other higher-order models and flight data.
4) Capture rotor-to-rotor interaction for coaxial aircraft.
5) Investigate control requirements of FVL concept aircraft.
6) Develop additional handling qualities requirements, as necessary, to encompass added capabilities from FVL aircraft.
7) Design and develop projects that include simulation of flight testing in the development facility.
8) Produce reports (whole or in part) and present work to relevant audiences.

QUALIFICATIONS:

1) Education and Experience
   a) MS in Aerospace Engineering or related field required; Ph.D. preferred.
b) 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

c) Two years’ experience in applied research setting is highly desired.

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

3) Physical requirements
   a) Must be willing to travel domestically and internationally. Approximately four trips per year is anticipated, one involving international travel.
   b) Located at the NASA Ames Research Center. Therefore, this employee must meet security qualifications for entrance to the Center.
   c) 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 may be obtained from the Research Foundation Human Resources Department, through the Research Foundation’s web site at foundation-jobs@sjsu.edu or in person by visiting the Foundation, located at 210 North 4th Street, 4th Floor, San Jose, CA (corner of St. James and North 4th Streets). An application will be required for those interviewed.

San Jose State University Research Foundation
Attn: HR/Job Code SrPA FVL
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.