

**Universities Space Research Association
Stratospheric Observatory for Infrared Astronomy
NASA Ames Research Center
Moffett Field, California**

**Senior Software Engineer
Job Posting S0707**

Universities Space Research Association (USRA) is inviting applications as a part of the Stratospheric Observatory for Infrared Astronomy (SOFIA) program.

SOFIA is a premier observatory for infrared and submillimeter astronomy. A 747-SP aircraft will carry a 2.5-meter telescope designed to make sensitive infrared measurements on a variety of astronomical objects. It will fly at an altitude up to 45,000 feet. First light is expected in early 2009 and regular observing is expected to begin in 2010. SOFIA is a joint project between NASA and German Aerospace Center, DLR. USRA will operate the SOFIA Science Center at NASA's Ames Research Center for NASA. The aircraft observatory will be based at NASA's Dryden Flight Research Center at Edwards Air Force Base.

USRA is seeking a **Senior Software Engineer** to work in Information Systems Development (ISD). The candidate will support development of the science mission operations (SMO) software and lead the integration, test, and verification of this software on SOFIA for Early Science. The SMO operations software provides coordinated transformation and integrated SOFIA Command Language (SCL) functionality for routine operations of the observatory and in a minimal configuration for Early Science. The SCL provides the science investigator and science instruments with the ability to point the telescope assembly and automate its motions in multiple coordinate systems of interest to astronomers. This functionality is critical for efficient observing during routine operations. The candidate will work with USRA engineers in designing, coding, testing, debugging, configuring, documenting, and verifying these software systems both in the Systems Integration Laboratory at Ames Research Center, and on the aircraft. The successful candidate will have an office at NASA Ames Research Center Moffett Field, CA. with frequent travel to Dryden Flight Research Center during integration and operations.

Qualifications and experience required for this position:

- Bachelor's degree in software engineering, computer science, physics/astronomy, or a related science/engineering field
- Two to five years of experience in science applications or related area
- Minimum of five years C++ object-oriented development experience in the Solaris environment.
- Experience with client-server architectures using CORBA is required (ACE/TAO preferred)
- Demonstrated experience and leadership in the integration, debugging, testing and verification of distributed real-time systems
- Background in the full software lifecycle, from requirements analysis to formal system delivery
- Working knowledge in the application of software systems in the execution of scientific research

Compensation for this position is competitive, and based on candidates' experience and expertise.

Applicants should submit a copy of their CV, list of publications, and a description of their research interests, names and contact information of three references.

Please submit your resume, with salary requirements, in Word or PDF with your last name and job number as the document title. Please specify in your cover letter if you will require an employer sponsored Visa.

Example Smith S0707 at: <http://www.sofia.usra.edu/Employment/employment.html>

E-Mail Resume to: MCSSRSWE@sofia.usra.edu

USRA is an Equal Opportunity Employer. Applicants selected will be subject to a government security check. USRA performs detailed background investigations on all candidates as a condition of hire.

Position open until filled.

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