



# STUDENT RESEARCH AND DEVELOPMENT (R&D) PROGRAM

#### Location:

NASA Ames Research Center, Moffett Field, CA.

## **Point of Contact:**

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# Web Site: http://nams.usra.edu

## Applications:

To apply for an internship, please submit your resume to NAMS-studentRD@usra.edu NASA Academic Mission Services (NAMS) Student Research & Development (R&D) Program supports current and future research by encouraging students to continue their education in Science, Technology, Engineering and Mathematics (STEM) fields to support NASA's Mission.

The NAMS contract, led by USRA, provides NASA Ames Research Center with capabilities to fulfill mission requirements from fundamental research and development through field-test deployments and operational science missions.

The Student R&D Program supports the overall mission of NAMS. The key technology areas include: Aeronautics, Earth Science, Intelligent Systems and Bio-Sciences and the goal of the program is to advance the research being performed on the NAMS contract by identifying and providing students with research projects, which align with their education goals in STEM fields.

The unique aspect of this program is for the student to work collectively with the

NAMS PI and academic professor to ensure successful outcome of the project milestones and their educational thesis are met.

## Internship Objectives

Internships are offered across technical disciplines of NAMS and closely tied to research and development aspects of the tasks. Student support is provided in a wide variety of ways, dependent on individual NAMS research task order objectives and student availability.

The students' education level can range from undergraduate to graduate degrees. The period of performance ranges from 10-week session to longer periods up to two (2) calendar years.



NAMS Student R&D 2017 Program Participants in front of the Ames Unitary Plan Wind Tunnel The students can be local or temporarily located at the NASA site or work from their remote university.

# Student R&D Engagements

 Onsite: Internship at the NASA Site
Virtual: Project-based engagement at a University Campus
Hybrid: Part-Time Internship at NASA Site and Part-Time at University Campus (e.g., project-based courses with university credit during the school year plus summer internship at NASA site)

# **Available Research Areas**

These opportunities are in technical areas, which provide benefit, value and importance to advancing NASA's R&D mission. Research opportunities are available for students across a broad range of technical area as listed below:

Advanced Technological Systems

- Human Systems Integration
- Intelligent Systems
- Supercomputing
- Entry Systems & Technology

# Aeroflight Dynamics

- Rotorcraft Aeromechanics
- Human Systems Integration
- Experimental Aerodynamics
- Flight Control and Cockpit Integration

Aerospace and Air Traffic Management

- Aero Acoustics Engineering and Software
- Air Traffic Management Automation
- Unmanned Aircraft Systems

## Information Technology

- Autonomous Systems
- Cloud Computing
- Computational Modeling and Simulation
- Quantum Computing
- Information and Data Systems
- Intelligent Robotics
- Machine Learning and Data Mining

# Science

- Advanced Aerospace Materials
- Gene-Lab
- Nano-electronics and Devices
- Space Bioscience
- Space Sciences and Astrobiology
- Earth Science including NASA's Earth Venture Program



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