Opportunity Title: Methods and Tools for Performance Modeling, Measurement, Analysis, Evaluation, and Prediction
Opportunity Reference Code: 0010-NPP-MAR26-ARC-TechDev

Organization National Aeronautics and Space Administration (NASA)

Reference Code 0010-NPP-MAR26-ARC-TechDev

How to Apply All applications must be submitted in Zintellect

Please visit the NASA Postdoctoral Program website for application instructions and requirements: How to Apply | NASA Postdoctoral Program (orau.org)

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 4/2/2026 6:00:59 PM Eastern Time Zone

Description **About the NASA Postdoctoral Program**

The NASA Postdoctoral Program (NPP) offers unique research opportunities to highly-talented scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

Description:

High-performance computing is an enabling technology for progress in Information Technology. Ultrafast computing systems are anticipated to be a key technology for a variety of NASA missions, including aeronautics, climate modeling, astrophysics, planetary exploration, and human space flight.

Our goal is to develop and evaluate methodologies for generating performance models for algorithms and applications running on high-performance computer platforms. These models will be used to evaluate the performance-sensitive components in HPC systems and to predict performance when changing problem or system parameters, and when porting to different platforms.

The candidate must have a broad background in computing; a strong knowledge of algorithms, numerical techniques, and computational methods; expertise in one or more scientific NASA applications (e.g., aeronautics, space and Earth sciences); and experience programming distributed memory parallel computers, using message-passing, or data parallel programming paradigms.

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Location:
Ames Research Center
Moffet Field, California

Field of Science: Technology Development

Advisors:
Subhash Saini
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650-604-4343

Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at: https://www.nasa.gov/oiir/export-control.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Questions about this opportunity? Please email npp@orau.org

Point of Contact Mikeala

Eligibility Requirements
- **Degree:** Doctoral Degree.