

**Opportunity Title:** Fellowship in Water Security

**Opportunity Reference Code:** NGA-2021-0020

**Organization** U.S. Department of Defense (DOD)

**Reference Code** NGA-2021-0020

**How to Apply** Click on *Apply* now at the bottom of the opportunity to start your application.

**Description** The Department of Defense (DoD) is offering a postdoctoral fellowship at the National Geospatial-Intelligence Agency (NGA), a world leader in timely, relevant, accurate and actionable GEOINT.

#### **What will I be doing?**

Water is a vital component to human health and is closely linked with global security. As the selected candidate, you will join a community of scientists and researchers engaged in cutting edge research to address water security topics in one of two NGA Research Technical Teams: the Foundation Team or the Predictive Analysis Team.

NGA's Research Directorate, Foundation Team, advances capabilities and disruptive technologies to observe, extract, represent and attribute natural and man-made features, terrain, and bathymetry to characterize the earth. Research to exploit geospatial data to build future GEOINT capabilities addressing systemic and emerging defense and intelligence missions is also performed.

NGA's Research Directorate, Predictive Analysis Team, encompasses techniques from data mining, predictive modeling, and machine learning that analyze current and historical facts to make predictions about future or other unknown events. Sometimes the event is in the future, but predictive analytics can be applied to any time of unknown – past, present or future.

Your participation in and contributions to this research will support President Biden's Executive Order on tackling the climate crisis, for which water security is a major component.

#### **Where will I be located?**

Springfield, Virginia, or St. Louis, Missouri

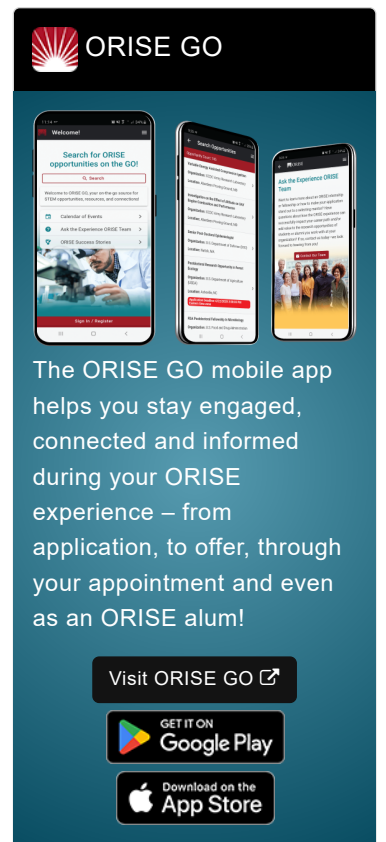
#### **What is the anticipated start date?**

NGA is ready to make appointments immediately. Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and fellowships will be filled as qualified candidates are identified.

#### **What is the appointment length?**

Appointments are initially for one year with the option to extend the appointment for up to four additional years, contingent upon project needs and funding availability.

#### **What are the benefits?**



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As the selected candidate, you will receive:

- Stipend payments, determined by NGA, based on your academic credentials and commensurate with GS Locality Pay Tables
- Health Insurance Allowance
- Relocation Allowance, if you are located more than 50 miles one way from the hosting facility
- Travel Expense Allowance
- Education and Research Support Allowance

### **Security Clearance**

You must have or be eligible to obtain and maintain a security clearance for the duration of your appointment. It is expected that after completing the necessary application for clearance a fitness determination will allow participation to begin with unclassified material, while awaiting a clearance.

### **About NGA**

The National Geospatial-Intelligence Agency (NGA) delivers world-class geospatial intelligence that provides a decisive advantage to policymakers, warfighters, intelligence professionals, and first responders. Anyone who sails a U.S. ship, flies a U.S. aircraft, makes national policy decisions, fights wars, locates, target, responds to natural disasters, or even navigates with a cellphone relies on NGA. NGA enables all of these critical actions and shapes decisions that impact our world through the indispensable discipline of geospatial intelligence. For more information about NGA, please visit <https://www.nga.mil/>.

### **About ORISE**

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the [ORISE Research Participation Program at the U.S. Department of Defense](#).

### **Key Words:**

Radar, Hyperspectral, Spectral, Satellite, Geology, Earth Science, Water Quality, Natural Resources, Dam, Levee, Civil Engineering, Infrastructure, Remote Sensing, GIS, Geospatial, Hydrology Modeling, Hydraulic Modeling, Water Resources, Digital Elevation Models (DEM), Terrain Data, Flood, Natural Disasters, Landslides, HPC, Soils, Terrain Mobility, Lidar Data

**Qualifications** The qualified candidate will have a doctoral degree or be within nine

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months of completion of that degree. Degree must have been received within five years of the appointment start date. U.S. military veterans who have been honorably discharged (or who have been medically discharged because of a service-connected disability) and who received a doctoral degree within ten years of the desired start date are also eligible.

Highly competitive applicants will have education and/or experience in one or more of the following:

- Hydrology
- Civil Engineering
- Physical and/or Natural Sciences
- Geographic Information Systems
- Remote Sensing
- Data mining
- Machine Learning
- Predictive Modeling

U.S. citizenship is required.

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. [Click here for detailed information about acceptable transcripts.](#)
- 2 Recommendation(s)

*Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blacked out, blackened out, made illegible, etc.) prior to uploading into the application system. All documents must be in English or include an official English translation.*

If you have questions, send an email to [orisedod@orise.orau.gov](mailto:orisedod@orise.orau.gov). Please list the reference code of this opportunity in the subject line of the email.

References should be from persons familiar with your educational and professional qualifications (include your thesis or dissertation advisor, if applicable). Personal references are NOT acceptable.

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**Eligibility** • **Citizenship:** U.S. Citizen Only

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- Requirements**
- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
  - **Discipline(s):**
    - **Chemistry and Materials Sciences** ([12](#))
    - **Communications and Graphics Design** ([2](#))
    - **Computer, Information, and Data Sciences** ([17](#))
    - **Earth and Geosciences** ([21](#))
    - **Engineering** ([27](#))
    - **Environmental and Marine Sciences** ([14](#))
    - **Life Health and Medical Sciences** ([46](#))
    - **Mathematics and Statistics** ([10](#))
    - **Physics** ([16](#))
    - **Science & Engineering-related** ([1](#))
    - **Social and Behavioral Sciences** ([28](#))