Opportunity Title: Overview of NGA Tech Focus Areas 2020
Opportunity Reference Code: NGA-VSP-2020-0009

Organization	U.S. Department of Defense (DOD)
Reference Code	NGA-VSP-2020-0009
How to Apply	Components of the online application are as follows:

- Profile Information

- 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 (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system.

If you have questions, send an email to **ORISEDOD@orise.orau.gov**. Please list the reference code of this opportunity in the subject line of the email.

All documents must be in English or include an official English translation.

Letter of Recommendation: While a letter of recommendation is not required to be considered, applicants are required to provide contact information for one recommendation in order to submit the application. Applicants are encouraged to request a letter of recommendation before submission as this may help reviewers have a better understanding of the applicant's qualifications and interests. If selected, a letter recommendation must be submitted on your behalf upon acceptance of the appointment.

Description	The National Geospatial-Intelligence Agency (NGA) is a unique combination of combat support agency and intelligence agency. We are the world leader in timely, relevant, accurate, and actionable GEOINT. Anyone who fights wars, locates targets, sails a U.S. ship, flies a U.S. aircraft, makes national policy decisions, responds to natural disasters, or even navigates with a cell phone relies on NGA.

Overview of the 5 NGA Tech Focus Areas

NGA Tech Focus Area 1 - Advanced Analytics and Modeling
NGA analysts need to create mission-focused models that describe knowledge about an intelligence topic in a machine-readable format. These

object- and relationship-centric models will allow analysts to identify collection opportunities, process and characterize multiple sources of GEOINT data, and monitor and infer activity and outcomes. An effective knowledge model will also enable analysts to create and test analytical hypotheses and conduct predictive and anticipatory analysis. These advancements will help NGA get the best product to the end user faster.

NGA Tech Focus Area 2 - Data Management
Observation datasets of the Earth's physical and cultural characteristics - including elevation, bathymetry, gravity and human geography enable the GEONT community to orient, decide and act faster than ever before, and geospatial data is now viewed as an important commodity with universal demand across an ever-increasing marketplace. The rapid advancement of technology and the increasing density of interconnected devices and sensors has led to an explosion of geospatial data from sources with diverse organization schemas and security requirements. There is an increasing demand for timely and agile integration of new data management technologies.

NGA Tech Focus Area 3 - Modern Software Engineering
New software approaches are creating efficient ways for NGA's government, military, and contractor teams to deliver their services and capabilities necessary for support the GEOINT mission. NGA is enhancing its infrastructure to support greater unclassified collaboration and increase execution speed. Modern development practices enable teams to rapidly build, test, and deploy capabilities to the enterprise that have been built with users of each step in the process. Improved visibility and testing of the software supply chain will enable open-source software to be more widely and easily used and allow NGA to embrace open-source innovation.

NGA Tech Focus Area 4 - Artificial Intelligence (AI)
A revolution in geospatial AI is driving the urgent technology needs of the GEOINT community. Built on a modern software environment and data management framework, AI is a necessary force-multiplier for advanced analytics and modeling capabilities. Machine-assisted technologies, such as computer vision, endeavor to automatically detect, extract, and attribute features and objects in imagery and video. Geospatial AI will be needed to support and expand our intelligence professionals' depth and coverage. NGA is seeking novel, innovative approaches to increase capability in computer vision on existing geospatial datasets.

NGA Tech Focus Area 5 - Future of Work
The future of work of NGA requires the amplification of human-machine partnerships and a more productive and collaborative workforce. Increasing the efficiency and ability of NGA's internal elements to work better together - across classifications - will amplify the intelligence products that we can provide to NGA's customers.

For full details on the NGA Tech Focus Areas please visit:
https://www.nga.mil/MediaRoom/PressReleases/Pages/NGA-Tech-Focus-Areas-chart-path-for-geospatial-technologies.aspx

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Appointment Length

This appointment is a twelve month research appointment, with the possibility to be renewed for additional research periods. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

Participant Benefits

Participants will receive a stipend to be determined by **NGA.** Stipends are typically based on the participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

- Health Insurance Supplement. *Participants are eligible to purchase health insurance through ORISE.*

- Relocation Allowance

- Training and Travel Allowance

Nature of Appointment

The participant will not enter into an employee/employer relationship with ORISE, ORAU, DOD, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

Qualifications   Please see individual NGA postings for the desired qualifications:

https://www.zintellect.com/Opportunity/Details/NGA-VSP-2020-0001

https://www.zintellect.com/Opportunity/Details/NGA-VSP-2020-0002

https://www.zintellect.com/Opportunity/Details/NGA-VSP-2020-0003

https://www.zintellect.com/Opportunity/Details/NGA-VSP-2020-0004

https://www.zintellect.com/Opportunity/Details/NGA-VSP-2020-0005

Eligibility Requirements
- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or 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** (16 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Other Non-Science & Engineering** (2 👁)
  - **Physics** (16 👁)

- **Science & Engineering-related** (1 👁)
- **Social and Behavioral Sciences** (27 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).