

**Opportunity Title:** Big Data, Machine Learning, AI for Homeland Security

Missions

**Opportunity Reference Code:** DHS-RPP-DA-TC-2022



**Organization** U.S. Department of Homeland Security (DHS)

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**Application Deadline** 4/22/2022 11:59:59 PM Eastern Time Zone

**Description** Our research addresses both strategic and tactical concerns of the Department of Homeland Security (DHS). We offer a challenging and fast-paced environment that accommodates the exploration of new ideas that improve operational efficiency while preserving the privacy and civil rights of individuals. Under the oversight of cognizant Federal personnel, participating researchers have opportunities to lead tasks, explore new research areas for DHS, and participate in networking opportunities. Our staff come from technical fields and other fields such as Policy, Economics, and Anthropology to enable multi-disciplinary approaches to problem solving.

Data Analytics Technology Center (DA-TC) is seeking candidates with a technical background in applied large-scale computing related to blockchain, cyber security, cyber threat hunting, cyber data analytics, infrastructure security, machine learning, artificial intelligence, human-machine teaming, high performance computing, homomorphic and secure multi-party computation, edge and real-time analytics, and technology policy research to address evolving mission and homeland security needs. Other applicants who have a strong interest in data analytics specific to homeland security missions are also encouraged to apply.

#### Where will I be located?

Washington, D.C.

#### What are the benefits?

Selected participants will receive a competitive stipend for living and other expenses during this appointment as determined by DHS. Stipends are determined by participant's academic standing, discipline, and experience.

Participants may also be eligible to receive

- Health insurance allowance,
- Reimbursement for travel expenses, and
- Travel/training allowance for professional development and travel to professional meetings, such as conferences.

#### Duration

Fellowships are for one year and may be extended based upon project needs and funding availability for up to 5 years.

#### Security Clearance

Although you will not enter into an employee/employer relationship with ORISE, ORAU, DHS or any other office or agency, 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 DHS DA-TC

The Department of Homeland Security's Science and Technology Directorate (S&T) conducts research, development, test, and evaluation on behalf of the homeland security enterprise (HSE). S&T's [Data Analytics](#)

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**Technology Center (DA-TC)** applies leading-edge data analytics research and development techniques to enable user-focused, data-driven solutions for homeland security missions. DA-TC operates a state of the art data analytics work center infrastructure to support mission relevant evaluations of strategic data research and development, emerging technology assessments and rapid experimentation. DA-TC conducts research in future computing architectures, application and evaluation of analytic solutions, and assessments of emerging architecture and analytic solutions.

**DHS mission areas include the following:**

- Protect Americans from terrorism and other homeland security threats.
- Secure the nation's air, land, and sea borders to prevent illegal activity while facilitating lawful travel and trade.
- Secure Cyberspace and Critical Infrastructure.
- Preserve and uphold the Nation's prosperity and economic security.
- Strengthen preparedness and resilience.
- Champion the DHS workforce and strengthen the department.

For more information about DHS visit: <https://www.dhs.gov/mission>

**Administrative Notes:**

- You will not enter into an employee/employer relationship with ORISE, ORAU, DHS 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.
- The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g., facial covering, physical distancing, testing, vaccination).

**Qualifications** To qualify for this opportunity you must,

- Be 18 years of age or older at time of application.
- Be currently pursuing or have received a Bachelor's degree, Master's degree, or Doctoral degree from an accredited college or university in a desired discipline. Please see full list of disciplines at the end of this announcement.
- Be a U.S. citizen.

Preferred: Experience with analysis of large-scale data sets.

**A complete application consists of:**

- Complete Zintellect profile
- Essay Questions - The application includes questions specific to the opportunity.
- Current Resume/CV
- Academic Records: The applicant must submit records for the most recent degree or degree in progress. Unofficial transcripts or copies of academic records provided by the applicant or by academic advisors from internal institutional systems may be submitted.
- One (1) Recommendation: Applicants are required to provide contact information for at least one recommendation in order to submit the application. You are encouraged to request a recommendation from a professional who can speak to your abilities and potential for success as well as your scientific capabilities and personal characteristics. **Recommendation requests must be sent through the Zintellect application system.** Recommenders will be asked to complete a recommendation in Zintellect. **Recommendations submitted via email will not be accepted.** Recommendation must be submitted before an offer is made.

All documents must be submitted via Zintellect. All application components must be received in the system in

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order to be considered.

If you have questions, please send an email to [DHSed@orau.org](mailto:DHSed@orau.org).

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#### Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (15 👁)
  - **Earth and Geosciences** (2 👁)
  - **Engineering** (4 👁)
  - **Environmental and Marine Sciences** (1 👁)
  - **Mathematics and Statistics** (6 👁)
  - **Other Non-Science & Engineering** (2 👁)
  - **Social and Behavioral Sciences** (5 👁)
- **Age:** Must be 18 years of age