

**Opportunity Title:** Data / Computer Science Research for Advanced Research & Development Project (Cybersecurity Assistive Automation)  
**Opportunity Reference Code:** DEVCOM-DAC-2022-0003

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

**Reference Code** DEVCOM-DAC-2022-0003

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

**Description** The U.S. Army DEVCOM Analysis Center (DAC) is offering student and postgraduate internships at Aberdeen Proving Grounds, Maryland.

**What will I be doing?**

As an ORISE participant, you will join a community of scientists and researchers at the U.S. Army DEVCOM Analysis Center (DAC), where they are leading a three-year applied research and development project entitled ACCOLADE (Augmented Cyber Cognition with Operational Learning Automation of Deployable Expertise). A major focus in the cyber domain is the interaction between human operators and their tools. The project objective is to develop an assistive automation capability to provide decision support to cyber operators with expert tactics, techniques, and procedures to support training and operations. Novel assistive automation technology is sought to improve cyber operators' ability to meet the increasing size, speed, and complexity of tomorrow's cyber battlefield. Capability development will be iterative with data acquired during a campaign of experimentation involving human-operators in cyber test-ranges using scenarios that are realistic and operationally relevant in terms of network traffic and adversarial challenges.

**Why should I apply?**

Under the guidance of a mentor, you will engage in a variety of research activities, including:

- Utilization of applied scientific methods, processes and algorithms.
- Modeling human cyber workflows
- Data labeling
- Developing machine learning classifiers to understand and infer human workflows for decision-support application.
- Application of analytic methods to measure response, analysis, prediction and simulation of system and component performance parameters
- Synthesizing results of human system experimentation in scenario-based cyber test-range environments to develop and extrapolate new and existing models

Key factors that contribute to our experimentation campaign are supported by our expertise and assets, namely: access to appropriate infrastructure and participant populations, methods to execute realistic and operationally valid protocols (existing cyber mission force scenarios), and techniques/measures to assess operator/ensemble performance on relevant dimensions.

**Where will I be located?** Aberdeen, Maryland

**What is the anticipated start date?**

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 internships/fellowships will be filled as qualified candidates are identified.

**What is the 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,



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project assignment, program rules, and availability of the participant.

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

You will receive a stipend to be determined by DEVCOM-DAC. Stipends are typically based on a 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

#### **About DEVCOM-DAC**

The U.S. Army Combat Capability Development Command (DEVCOM) Analysis Center located along the upper Chesapeake Bay at Aberdeen Proving Ground, Maryland, delivers objective analysis, experimentation and data for the U.S. Army. As part of Army Futures Command, the center provides the analytical underpinnings to inform technology and human systems modernization decisions, while its lifecycle engineering perspective enables it to also focus on near term Readiness and Operational Tools for the Warfighter. The center provides agile, timely and integrated analytical products for item/system level performance and effectiveness, vulnerability/lethality, and human systems integration, enabling Army Futures Command to conduct streamlined decision processes that are underpinned by sound evidence-based analysis.

#### **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](#).

**Qualifications** The qualified candidate will have earned or be currently pursuing a Bachelor's, Master's or Ph.D. in Data Science, Artificial Intelligence/Machine Learning, Computer Science (Cybersecurity), Agile Software Development, Experimental Psychology, Human Factors Engineering, or a related discipline. For postgraduate candidates, the degree must have been earned within 5 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 degree in one of the above disciplines 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:

- Conducting independent research
- Collaboration with a team
- Planning and carrying out hypotheses

#### **Application Requirements**

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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.](#)
- Two recommendation(s). Your application will be considered incomplete and will not be reviewed until two recommendations are submitted. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect.  
Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

If you have questions, send an email to [ARMY@orise.orau.gov](mailto:ARMY@orise.orau.gov). Please list the reference code of this opportunity [DEVCOM-DAC-2022-0003] in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

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- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
  - **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 months or currently pursuing.
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([17](#) )
    - **Social and Behavioral Sciences** ([29](#) )
  - **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).