Opportunity Title: DEVCOM Analysis Center Modeling & Amp Simulation Internship
Opportunity Reference Code: DEVCOM-DAC-2025-0001

Organization U.S. Department of Defense (DOD)

Reference Code DEVCOM-DAC-2025-0001

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

Description The U.S. Army Combat Capabilities Development Command (DEVCOM) Analysis Center (DAC) is offering an internship.

What will I be doing?

As an ORISE participant, working on the Vulnerability Methodology Team at the U.S. Army DEVCOM Analysis Center (DAC), where they are practicing vulnerability and lethality modeling and analysis using the Advanced Joint Effectiveness Model (AJEM) and incorporating new methodologies such as the Armor Protection System Endgame Model (APS-EGM), and BlastX which is a new model for predicting blast effects on systems. In this full-time role you will learn about and support a wide array of activities in support of the Vulnerability Methodology Team's efforts to improve and validate our models. AJEM is a highly complex model for predicting lethality/vulnerability/effectiveness of ground mobile systems and other systems. AJEM contains many sub-models (test and physics based). Precision and accuracy of any model is dependent on many things, but especially the quality of the input-data and the validity of the submodules. Model sensitivity is directly associated with the model uncertainty, and the use of this framework can be extended. It is the mission of the Vulnerability Methodology Team to ensure that the underlying methods of AJEM and its associated models are accurate, practical, relevant, effective, and well documented, so that decision makers can use the capability of these critical models to characterize and navigate the ever-changing size, speed, and complexity of tomorrow's multi domain battlefield.

Why should I apply?

This internship focuses on modeling Army and Joint system effectiveness, improving our models and increasing awareness, understanding, and confidence in these models, and pulls from a multitude of science, math and engineering disciplines. You will have the opportunity to be involved in physical testing on the ranges, software development, systems analysis, planning activities, and much more. You will be able to grow in a related discipline while networking and expanding your experiences in new directions to gain skills that will be advantageous to any related career. You have the opportunity to bring new skills and capabilities to improve our products and processes. We would like to expand/modernize our capabilities in areas such as machine learning development and application, fluid dynamics, material science, application development, data sciences, engineering sciences, and physics.

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

- Process and Model Mapping
  - Develop Documentation Overview and/or Wiki for AJEM model information, processes, dependencies, etc.
  - Update/Create posters and graphics to represent AJEM and EGM flow and capabilities
- Assist in model Verification and Validation Efforts
- Experimentation and Analysis
- Reporting and Documentation
- Collaboration and Training
- Share knowledge and best practices related to Vulnerability and Lethality Modeling

Opportunity Title: DEVCOM Analysis Center Modeling & Amp Simulation Internship
Opportunity Reference Code: DEVCOM-DAC-2025-0001

Methodology

Where will I be located?

Aberdeen, Maryland

What is the anticipated start date?

DEVCOM-DAC is prepared to begin appointments May 26, 2025.

What is the appointment length?

This appointment is an 18-week 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.

What are the appointment provisions?

The stipend to be determined by DEVCOM-DAC and are typically based on a participant's academic standing, discipline, experience, and research facility location.

About DEVCOM-DAC

The Combat Capabilities Development Command (DEVCOM) Analysis Center (DAC) is an Army Futures Command organization that conducts a variety of critical analyses to provide state-of-the-art analytical solutions to senior level Army and Department of Defense officials. The Analysis Center's responsive systems analysis supports the equipping and sustaining of weapons and materiel for our Soldiers in the field as well as our Future Army Force.

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 be currently pursuing a bachelor's or master's degree with at least two semesters of course work completed towards a Science, Math, or Engineering Degree at an accredited college and a cumulative GPA of 3.0 or higher on a 4.0 scale

- Problem-solving and creative thinking skills to assist in analyzing and solving complex modeling related questions
- Teamwork and collaboration skills
- Effective communication skills to convey technical information to both technical and non-technical stakeholders
- Experience in scripting or programming languages (e.g., Python, PowerShell)

Opportunity Title: DEVCOM Analysis Center Modeling & Amp Simulation Internship
Opportunity Reference Code: DEVCOM-DAC-2025-0001

Application Requirements

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 - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. Click here for detailed information about acceptable transcripts.
- One Recommendation. 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. Please list the reference code of this opportunity DEVCOM-DAC-2025-0001 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.

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Point of Contact Richard

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Currently pursuing a Bachelor's Degree or Master's Degree.
- **Minimum Overall GPA:** 3.00
- **Discipline(s):**
  - **Communications and Graphics Design** (2)
  - **Computer, Information, and Data Sciences** (17)
  - **Engineering** (27)
  - **Mathematics and Statistics** (11)
  - **Physics** (16)
- **Age:** Must be 18 years old by 5/1/2025