

**Opportunity Title:** USAISR Engineering / Computer Science Post-Doctoral Fellowship

**Opportunity Reference Code:** USAISR-2025-0004

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

**Reference Code** USAISR-2025-0004

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

**Description** The U.S. Army Institute of Surgical Research (USAISR) is offering a postdoctoral fellowship at Joint Base San Antonio (JBSA).

**What will I be doing?**

As an ORISE participant, you will join a community of scientists, engineers, and researchers in an effort to develop medical automation research solutions. You will support various engineering and computer science aspects of research projects focused on optimizing combat casualty care. These projects include closed loop physiological controller development, creating in silico computer models for mimicking human physiology in trauma, and automating ultrasound image interpretation through deep learning model development using Python and MATLAB.

**Why should I apply?**

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

- developing machine learning algorithms for various research projects
- creating medical image automation algorithms
- writing combat casualty care relevant military research proposals
- preparing manuscripts for submission to peer-reviewed research journals
- conducting human and animal translational research studies

**Where will I be located?** San Antonio, Texas (In Person)

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

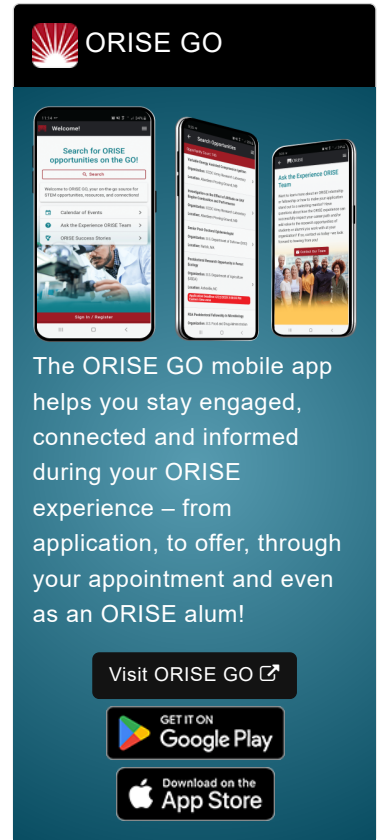
**What are the provisions?**

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

- Participants are eligible to purchase health insurance through ORISE
- Relocation Allowance
- Training and Travel Allowance


**About USAISR**


The U.S. Army Institute of Surgical Research is a research laboratory within the U.S. Army Medical




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Research and Materiel Command of the U.S. Army Medicine Command. The Institute is the Army's lead research laboratory for improving the care of combat casualties. The mission of the Institute is to "Optimize Combat Casualty Care". The Organ Support and Automation Technologies Combat Casualty Care Research Team at USAISR is developing technologies and products that will assist medics in providing life-saving interventions in the Prolonged Field Care (PFC) environment.

#### **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 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 hold a doctoral graduate in one of the STEM fields listed in the eligibility section of the opportunity.

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

- Engineering, automation, and technology-related medical research
- Experience with computer programming in Python / MATLAB, especially related to deep learning model development and testing and/or control systems development.
- Experience drafting first author manuscripts and presenting at research conferences

#### **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-MRMC@orise.ora.gov](mailto:ARMY-MRMC@orise.ora.gov). Please list the reference code of this opportunity [USAISR-2025-0004] 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

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materials to the email address above.

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**Point of Contact** [Kimberly](#)

**Eligibility** • **Citizenship:** LPR or U.S. Citizen

**Requirements** • **Degree:** Doctoral Degree received within the last 60 month(s).

• **Discipline(s):**

◦ **Computer, Information, and Data Sciences** ([17](#) 👁)

◦ **Engineering** ([29](#) 👁)

• **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).