

**Opportunity Title:** EACE Rehabilitation Data Science Fellowship

**Opportunity Reference Code:** EACE-2020-0011

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

**Reference Code** EACE-2020-0011

**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.](#)
- Recommendation(s) Required

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 [STEM-WORKFORCE@orise.orau.gov](mailto:STEM-WORKFORCE@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.

**Description** The Extremity Trauma and Amputation Center of Excellence (EACE) is offering an ORISE learning opportunity that will focus on large-scale, longitudinal analyses of health outcomes following limb trauma and amputation in the military. This is a collaborative effort among a diverse group of researchers and clinicians across the United States. Data elements are diverse in time scale and format, including electronic health records and walking mechanics collected before and after injury with varied frequency over the course of physical rehabilitation. Short-term goals include the development of efficient strategies for data extraction, organization, and reduction. Long term goals include applying machine learning and artificial intelligence techniques to select, train, and evaluate models for the prediction of health and function outcomes. Research products will play a key role in advancing clinical strategies to maximize physical function and quality of life in this patient population.

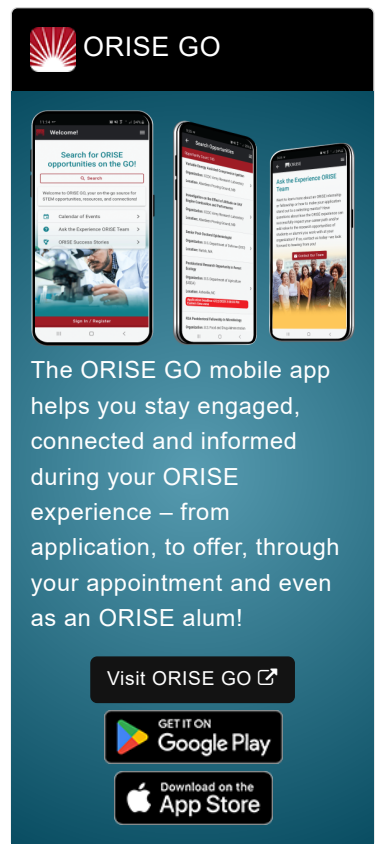
As an ORISE participant, you will be provided a hands-on, collaborative experience to take an early-stage project from initiation to analysis to knowledge product generation in a short period of time with a high return on investment. You will also have the opportunity to contribute to grant submissions to add to their knowledge of pursuing funding and becoming an independent researcher. You will also have the chance to be a part of a network of post-doctoral fellows, both locally at Naval Medical Center San Diego and nationally across the EACE.

Please note: This research fellowship will be housed jointly between the Naval Medical Center San Diego (NMCSD) and the University of California - San Diego (UCSD).

For more information about EACE, please visit (<https://www.health.mil/About-MHS/OASDHA/HSPO/EACE>)


**Appointment Length**


This appointment is a eleven month research appointment, with the possibility to be renewed for




**ORISE GO**

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON  
 **Google Play**

Download on the  
 **App Store**

**Opportunity Title:** EACE Rehabilitation Data Science Fellowship

**Opportunity Reference Code:** EACE-2020-0011

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 **EACE**. 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** Opportunity Requirements:

- U.S. Citizenship, ability to obtain Secret clearance through background checks
- Degree: Computer science, bioinformatics, statistics, neuroscience, biomedical/electrical engineering (or similar)
- Programming (1 or more); Python (PySpark, PyTorch, scikit-learn), SQL, R, MATLAB, database ETL
- Experience with applied machine learning; feature engineering, dimensionality reduction (PCA, SVM), classification, clustering, regression, model selection and performance validation
- Proficient with software version control and collaborative coding (GitHub)
- Experience with deep learning, neural networks, e.g. LSTM
- Preferred, not required; familiarity with electronic health records, physical therapy, prosthetics & orthotics, biomechanics, human movement analysis
- Excellent organizational, time management, and communication skills (oral and written)
- Intellectual independence and initiative. Ability to collaborate as part of an interdisciplinary team is essential

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
  - **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
  - **Overall GPA:** 3.40
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([16](#) )
    - **Engineering** ([27](#) )
    - **Life Health and Medical Sciences** ([45](#) )
  - **Veteran Status:** Veterans Preference, degree received within the last 60 month(s).