

Opportunity Title: NPS: Power Quality and Security in Naval Maritime Systems - Postgraduate Fellowship
Opportunity Reference Code: NPS-2025-0003

Organization U.S. Department of Defense (DOD)

Reference Code NPS-2025-0003

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

Description The Naval Postgraduate School is offering a post-graduate fellowship.

What will I be doing and why should I apply?

The resiliency of maritime power systems depends on the ability to monitor energy data and devices in near-real time. There is limited study or insight into the understanding of how physical intrusions into different components can manifest in power data and how those manifestations can be detected and classified. The goal of this research is to enhance power quality and security for Naval power systems using non-intrusive approaches, advanced signal processing tools and machine learning to advance anomaly detection.

Under the guidance of a mentor, you will gain hands-on experience to complement your education and support your academic and professional goals. Along the way, you will engage in activities that include investigating cyber-physical anomaly diagnosis using data driven anomaly detection techniques to locate and classify between faults (caused by equipment degradation) and anomalies caused by cyberattacks. This project will focus primarily on the impact of large false data injection attacks (FDIA) on the physical layer operation of a maritime power electronics system. You will participate in validation and demonstration of developed anomaly detection tools on various Naval power electronic testbeds.

Where will I be located?

Monterey, California

What is the anticipated start date?

NPS is ready to make appointments immediately. 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.

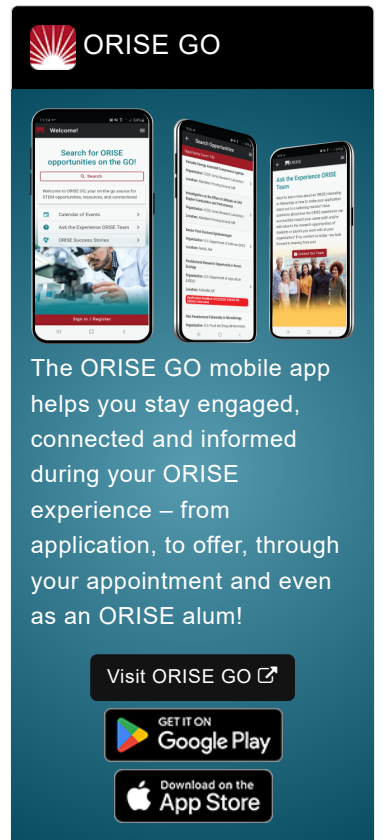
What is the appointment length?

This appointment is a 12-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 NPS. Stipends are typically based on a participant's academic standing, discipline, experience, and research facility location. **The anticipated annual stipend for a post-Doctoral participant would be \$67,000/year.** Other provisions may include the following:


- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance




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: NPS: Power Quality and Security in Naval Maritime Systems - Postgraduate Fellowship

Opportunity Reference Code: NPS-2025-0003

About NPS

The mission of the Naval Postgraduate School provides relevant and advanced educational and research experience to commissioned officers of the Naval Service to increase their combat effectiveness and enhance the security of the United States. In support of this mission as well as to sustain academic excellence, NPS and the U.S. Department of the Navy (DoN) foster and encourage an academic program of relevant and meritorious naval research. NPS research supports the needs of the Navy and the U.S. Department of Defense while also building the intellectual capital of Naval Postgraduate School.

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 is a U.S. citizen who will have a Master's or Doctoral Degree in Electrical Engineering or Computer Science, or will have completed by 6/30/2025.

Qualified candidates should have education and/or experience in power electronics/systems and/or machine learning. Experience and/or education in writing and submitting peer-reviewed publications is highly beneficial. The qualified candidate must have effective oral and written communications skills and the ability to collaborate effectively with a diverse set of faculty and graduate students.

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 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

Opportunity Title: NPS: Power Quality and Security in Naval Maritime Systems -

Postgraduate Fellowship

Opportunity Reference Code: NPS-2025-0003

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 navy@orise.orau.gov. Please list the reference code of this opportunity [NPS-2025-0003] 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.

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 • **Citizenship:** U.S. Citizen Only

Requirements • **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 6/30/2025 12:00:00 AM.

- **Discipline(s):**
 - **Computer, Information, and Data Sciences** ([1](#)👁)
 - **Engineering** ([1](#)👁)