HIRETHON
NATIONAL SECURITY INNOVATION NETWORK

Engineer (Principal Investigator)
Electrical, Systems, or Mechanical Engineering with a focus on Robotics and Automation
Master's Degree Preferred

Duties:

Serves as research scientist for ERDC CERL performing all levels of experimentation from basic to applied research and demonstration projects. The expectation for the position is to assist or lead in all aspects of planning, execution, evaluation, interpretation, and dissemination of research data and results to both the military and scientific communities.

Incumbent serves as Principal Investigator (PI) to lead and support the development of novel autonomous behaviors and localization/positioning solutions for robotic, unmanned, and mechatronic systems for the U.S. Army and Department of Defense robotic applications. This position requires working as part of a multidisciplinary science and engineering team doing cutting-edge research and technology development to support the Army Modernization efforts. Priority will be given to the candidates with experience and expertise in the following areas:

- Development of Machine Learning/Artificial Intelligence based control algorithms and their implementation
- Robot localization
- World model generation, cost map-based path planning
- Robot perception
- Robotic Operating System
- Object Detection and Classification
- Development of computer code and hardware implementation and testing for unmanned systems

Responsibilities include supporting capability development, physical implementation, and demonstration of unmanned robotic solutions according to a schedule driven by the Army Futures Command. The candidate will be expected to execute technical work, as well as participating in the development of competitive funding proposals, and publishing results in peer reviewed journals. Finally, the PI will be responsible for leading small teams and providing mentorship and guidance to junior level researchers.

General duties include, but are not limited to: developing and writing new innovative proposals for funding acquisition, developing and fostering communications within a scientific network for collaborations, performing top quality research both independently and as part of a team, functioning as a member of an internal research team in either a leading role or in a supportive role, dissemination of research results to the scientific community through platform presentations at scientific conferences and through research articles in high impact peer reviewed scientific journals, and acting as an ambassador to

promote ERDC research to internal visitors and the external community. Provide input and support to ERDC research projects as needed.

Level/Salary Range: DB4 (Equivalent to GS 12-14).
Level placement depends on the candidate's experience, education, and other qualifications.
View General Schedule (GS) ranges here.