

Opportunity Title: Research enabling future Hybrid Intelligence and Human-Centric Systems

Opportunity Reference Code: ARL-R-HCxS-400048-F1

Organization DEVCOM Army Research Laboratory

Reference Code ARL-R-HCxS-400048-F1

Description The Humans in Complex Systems Division at the U.S. Army Combat Capabilities Development Command (DEVCOM) Army Research Laboratory is seeking innovative and motivated researchers to join our multidisciplinary teams and contribute to groundbreaking research projects. Our division conducts cutting-edge foundational and applied research to advance the state-of-the-art in hybrid human-technology intelligence, cognitive systems, and human-machine teaming. We aim to address critical challenges in understanding and optimizing human potential in dynamic, complex environments.

Our research spans diverse disciplines—including computer science, artificial intelligence (AI), neuroscience, cognitive science, human-subjects research, mathematics, psychology, and engineering. Our teams work on a variety of exciting projects, and we invite researchers from all academic levels (undergraduate, graduate, postdoctoral, and professional) to collaborate in advancing state-of-the-art capabilities.

Our division conducts research across diverse fields, including hybrid human-technology intelligence, brain-inspired AI, human-AI teaming, and cognitive neuroscience. We explore areas such as graph-based neural and navigation models, multimodal human-machine interfaces, adaptive AI systems, and collective intelligence frameworks. Projects range from enhancing human cognition and decision-making to designing materials for neuroscientific applications, all aimed at advancing our understanding of human behavior, brain dynamics, and socio-technical systems. Researchers will have the opportunity to work on cutting-edge challenges in human performance optimization, team resilience, and the integration of AI into teams of humans in complex environments.

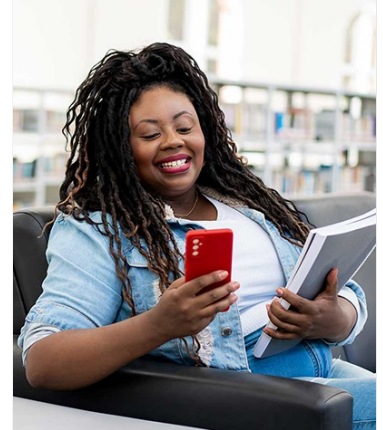
- Collaborate with multidisciplinary teams to scope and execute a research project aligned with your expertise and interests.
- Contribute to the development of theoretical frameworks, computational models, or experimental designs to address real-world challenges.
- Analyze and visualize data, develop prototypes, or conduct experiments in simulated or real-world environments.
- Participate in advancing foundational and applied research to support future capabilities for the Army and society at large.

Advisor Name: Javier Garcia

Advisor Email: javier.o.garcia.civ@army.mil

About ARD

ARL's Army Research Directorate (ARD) focuses on exploiting concept



Whether you are just starting your career or already at a senior level, ORAU offers internships, fellowships, research opportunities, and contract positions that can provide you with invaluable experience. Download the ORAU Pathfinder mobile app and find the right opportunity to propel you along your career path!

Visit ORAU Pathfinder [↗](#)



Opportunity Title: Research enabling future Hybrid Intelligence and Human-Centric Systems

Opportunity Reference Code: ARL-R-HCxS-400048-F1

development, discovery, technology development, and transition of the most promising disruptive science and technology to deliver to the Army fundamentally advantageous science-based capabilities through laboratory's 11 research competencies. This intramural research directorate also manages the laboratory's essential research programs, which are flagship research efforts focused on delivering defined outcomes.

About ARL-RAP

The [Army Research Laboratory Research Associateship Program](#) (ARL-RAP) is designed to significantly increase the involvement of creative and highly trained scientists and engineers from academia and industry in scientific and technical areas of interest and relevance to the Army. Scientists and Engineers at the CCDC Army Research Laboratory (ARL) help shape and execute the Army's program for meeting the challenge of developing technologies that will support Army forces in meeting future operational needs by pursuing scientific research and technological developments in diverse fields such as: applied mathematics, atmospheric characterization, simulation and human modeling, digital/optical signal processing, nanotechnology, material science and technology, multifunctional technology, combustion processes, propulsion and flight physics, communication and networking, and computational and information sciences.

About HUMANS IN COMPLEX SYSTEMS (HCxS)

Multi-disciplinary non-medical approaches to understand and modify the potential of humans situated in and interacting within complex social, technological, and socio-technical systems.

A complete application includes:

- **Curriculum Vitae or Resume**
- **Three References Forms**
 - An email with a link to the reference form will be available in Zintellect to the applicant upon completion of the on-line application. Please send this email to persons you have selected to complete a reference.
 - References should be from persons familiar with your educational and professional qualifications (include your thesis or dissertation advisor, if applicable)
- **Transcripts**
 - Transcript verifying receipt of degree must be submitted with the application. Student/unofficial copy is acceptable

If selected by an advisor the participant will also be required to write

Opportunity Title: Research enabling future Hybrid Intelligence and Human-Centric Systems

Opportunity Reference Code: ARL-R-HCxS-400048-F1

a **research proposal** to submit to the ARL-RAP review panel for :

- Research topic should relate to a specific opportunity at ARL (see [Research Areas](#))
- The objective of the research topic should be clear and have a defined outcome
- Explain the direction you plan to pursue
- Include expected period for completing the study
- Include a brief background such as preparation and motivation for the research
- References of published efforts may be used to improve the proposal

A link to upload the proposal will be provided to the applicant once the advisor has made their selection.

Questions about this opportunity? Please

email ARLFellowship@orau.org

Qualifications We welcome students, early-career researchers, and experienced professionals from a wide range of disciplines, including technical fields such as computer science, AI/ML, software engineering, mathematics, statistics, and human-computer interaction; life sciences like neuroscience, psychology, biomechanics, biomedical engineering, and cognitive science; and other areas such as physics, sociology, and related fields. Above all, we value scientific curiosity, a passion for innovation, and a collaborative mindset.

Point of Contact [ARL Fellowship](#)

- | | |
|---------------------|--|
| Eligibility | • Degree: Any degree . |
| Requirements | • Academic Level(s): Any academic level. |
| | • Discipline(s): |
| | ◦ Chemistry and Materials Sciences (12 ) |
| | ◦ Communications and Graphics Design (2 ) |
| | ◦ Computer, Information, and Data Sciences (17 ) |
| | ◦ Earth and Geosciences (21 ) |
| | ◦ Engineering (27 ) |
| | ◦ Environmental and Marine Sciences (14 ) |
| | ◦ Life Health and Medical Sciences (51 ) |
| | ◦ Mathematics and Statistics (11 ) |
| | ◦ Physics (16 ) |
| | ◦ Science & Engineering-related (2 ) |
| | ◦ Social and Behavioral Sciences (29 ) |