Opportunity Title: Machine Learning with Applications to Diagnostics, Prognostics and Risk Assessment
Opportunity Reference Code: ARL-C-VTD-1219293041

Organization DEVCOM Army Research Laboratory

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Description **About the Research**

Selected individuals will have the opportunity to perform research on topics of interest to the U.S. Government and to interact with leading scientists performing research and/or advising at the sponsor. The extensive partnering relationships with universities and other government agencies will expose participants to a broad research community. Fellows will have the opportunity to meet government decision-makers and learn directly from them about the role of scientific research in addressing complex, real-world (i.e., operational) needs. Furthermore, fellows have the opportunity to learn how research products transition from the proof-of-concept stage to integrated production systems.

Fellows will be selected based on the research proposal, academic records, recommendations, applied research interests and compatibility of background with applied research programs and projects at the host Installation. The initial appointment is typically for one year and may be renewed for up to three additional years based upon recommendation of the host installation and subject to availability of funds. The participant will receive a monthly stipend which is determined based upon level of education, training, and experience. Inbound travel and moving expenses are reimbursed according to established policies. Travel and other costs will also be reimbursed for training related to the project and approved by ORAU and the host installation. The participant must show proof of health and medical insurance. Health plans are available through the ORAU for Postgraduate Internship participants.

ARL Advisor: Mulugeta Haile

ARL Advisor Email: mulugeta.a.haile.civ@mail.mil

About VTD

The CCDCArmy Research Laboratory's Vehicle Technology Directorate (VTD) is the principal Army organization responsible for the pursuit of mobility-related science and technologies leading to advanced capabilities and improved reliability for Army air and ground vehicles. VTD leads the ARL Major Laboratory Program in mobility and the RDECOM Technology Focus Team in mobility and logistics. The technology focus areas within the ARL and RDECOM programs have been defined as platform, propulsion, intelligent systems and logistics.

The VTD mission is accomplished through in-house basic and applied research, and from collaborations with other ARL functions, RDECOM, Navy, Air Force, academia and industry leaders. The mission is enhanced through teaming with and leveraging of research efforts associated with Collaborative Technology Alliances (CTAs) and Multidisciplinary University

Research Initiatives (MURIs). For example, VTD is actively involved with two CTAs (Robotics and Micro Autonomous System Technologies), several cooperative agreements, and a unique partnership with the National Aeronautics and Space Administration (NASA) at the Langley Research Center in Hampton, VA and the Glenn Research Center in Cleveland, OH.

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.

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 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

Eligibility Requirements

- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Academic Level(s):** Faculty.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (16)
  - **Engineering** (27)
  - **Mathematics and Statistics** (10)
  - **Physics** (16)
  - **Science & Engineering-related** (1)