Opportunity Title: Developing Cognitive Models that Learn from Instruction
Opportunity Reference Code: AFRL711HPW-2019-0018

Organization U.S. Department of Defense (DOD)

Reference Code AFRL711HPW-2019-0018

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.
- Number of Recommendations required-1

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 **airforce@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 Air Force Research Lab 711th Human Performance Wing (711 HPW) is a unique combination of three units: the Airman Systems Directorate (RH), the US Air Force School of Aerospace Medicine (USAFSAM) and the Human Systems Integration Directorate (HP). The synergies of combining the ideas, resources and technologies of these units position the 711 HPW as a world leader in the study and advancement of human performance. For more information about the 711th HPW, please visit the following site: https://www.wpafb.af.mil/afrl/711hpw/.

This fellowship will involve conducting postdoctoral research on developing computational cognitive process models capable of learning from instruction. The research involves deriving knowledge representations from text-based instructions, integrating the new knowledge with existing knowledge, developing base knowledge and procedures to translate knowledge from instruction into action, and developing computational and analytical approaches to bring a task-knowledgeable model to a desired level of task proficiency.

Under the guidance of a mentor, the selected individual will have opportunities to influence significant portions of the research and will work closely with Dr. Christopher Myers & Dr. Christopher Stevens of the Cognitive Science, Models, & Agents Branch at the Air Force Research Laboratory (AFRL). Further, the fellowship would involve close collaboration with Dr. Dario Salvucci (Drexel), Dr. Pascal Hitzler (Kansas State University), and Dr. Benji Maruyama (Materials & Manufacturing Directorate, AFRL).

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Appointment Length

This appointment is an initial one year research appointment, with a following year requested for a total of two years. Appointments have 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.

Participant Benefits

Participants will receive a stipend to be determined by **USAFRL**. Stipends are typically based on the participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

o Health Insurance Supplement. *Participants are eligible to purchase health insurance through ORISE.*

o Relocation Allowance

o 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

Qualified candidates must be U.S. citizens. Will have (or will soon receive) a doctoral degree in cognitive science, psychology, AI/computer science, or a related field. Strong applicant experience in computational modeling and programming.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Currently pursuing a Doctoral Degree to be received by 6/1/2020 11:59:00 PM.
- **Academic Level(s):** Postdoctoral.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Communications and Graphics Design** (2 👁)
  - **Computer, Information, and Data Sciences** (16 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (45 👁)

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- **Mathematics and Statistics** (10 👁)
- **Other Non-Science & Engineering** (2 👁)
- **Physics** (16 👁)
- **Science & Engineering-related** (1 👁)
- **Social and Behavioral Sciences** (27 👁)