

## Postdoctoral Research Opportunity

We are seeking a highly motivated postdoctoral candidate to work with a multidisciplinary team led by Dr. Nina Lauharatanahirun (US CCDC Army Research Laboratory) and receive training at different sites of our collaborative multi-university initiative. Specifically, the postdoctoral researcher will also have the opportunity to work and receive mentorship from Drs. Katia Sycara (CMU) & Michael Lewis (University of Pittsburgh) who are leading experts in multi-agent systems and human-agent interactions. We seek applicants who are broadly interested in **social neuroscience and decision making** with a **strong** computational background.

### Project Description:

This DoD-funded interdisciplinary project aims to study the neural dynamics associated with cooperative decision making in both human-human and human-agent interactions. An overarching goal of the Human Sciences at the US CCDC Army Research Laboratory is to expand our understanding of individual and team behavior, providing the foundational research for individualized teaming technologies within heterogeneous human-agent teams. An important feature of individualized team technologies is the ability to predict future behavior quickly and accurately in dynamic environments for individuals working together for a common goal. We use a variety of physiological sensors, surveys, and other metrics to infer individual and teaming “states” that may be related to perception, attention, decision-making, or communication at the individual and group levels.

### Position Description:

The selected individual would benefit from a highly creative and collaborative research environment as well as the opportunity to work with a team of experts **from a range of disciplines (neuroeconomics, cognitive neuroscience, computer science, biomedical engineering, communication science, and social psychology)**. This position is a unique opportunity to conduct research in government and academic settings.

The selected individual would have the opportunity to: develop and/or implement human team experiments on research aims, carry out analysis on complex multi-modal data, as well as present research results at meetings and publish results. As part of the role, the postdoc will be expected to travel for experimentation and development and must have a desire to work with a geographically distributed, energetic, and interdisciplinary team. Travel sites include: Pittsburgh (CMU/UPitt), Chicago (Northwestern University), Boston (Northeastern University), and Aberdeen Proving Ground, MD (ARL). This is a one-year appointment with the possibility of extension to multiple years.

### Desired characteristics:

The ideal candidate will have excellent quantitative and verbal skills, strong programming skills, experience with conducting human experiments, an interest in the neuroscience of social decision making. Minimum qualifications include: (i) a PhD in psychology, computer science, economics, bioengineering, neuroscience, or a related field by spring of 2020; (ii) proficiency in Matlab, Python, or R is a must; (iii) previous experience with fMRI/EEG and ECG data acquisition is preferred; and (iv) experience with signal processing and machine learning.

### Timeline:

We will begin to evaluate applications **immediately**, and will continue to review applications on a rolling basis until the position is filled.

**To apply:** Please apply via the following link: <https://www.zintellect.com/Opportunity/Details/ARL-R-HRED-300047>. Any questions regarding the position can be directed to: [nina.lauharatanahirun.civ@mail.mil](mailto:nina.lauharatanahirun.civ@mail.mil) with subject line “ARL postdoc.”

*At ARL, we are committed to creating a diverse environment and are proud to be an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.*