**DEFENSE THREAT REDUCTION AGENCY**

**University Strategic Partnership**

**Candidate Recruitment Request**

*Submitted to PSU October 7, 2011*

**Requesting Office**:

Research and Development Enterprise, Basic and Applied Sciences Directorate (RD-BA)

Thrust Area 2 Cognitive and Information Sciences

**Education:**

The candidate should have a Ph.D. in computer science with an emphasis in artificial intelligence. The candidate should have some experience in software development in support of autonomous or semi-autonomous systems.

**Qualifications:**

* Knowledge and experience in the field of artificial intelligence (AI) with a special emphasis in reasoning, learning, knowledge development, and perception
* Experience developing algorithms and heuristics for autonomous systems operating in a dynamic environment
* Experience in the development of algorithms and heuristics for distributed computing and machine perception through fusion of multi-sensor input
* Excellent written and oral communication skills
* Excellent research skills, concomitant with ability to condense large amounts of information, eliminate extraneous data, and provide clarity of message
* Experience decomposing requirements into science topics
* Ability to multitask and align deliverables with tight project deadlines
* Ability to work independently and with other scientists and engineers, as necessary, with minimal direction/supervision

**Work Description**:

Employs basic research principles and standards, and engages in systematic studies directed toward greater knowledge or understanding of the fundamental aspects of artificial intelligence and autonomous systems. Provides subject matter expertise for basic and early applied research efforts, analytical support, and technical advice to the establishment of requirements. Provides technical oversight of scientific study and experimentation directed toward increasing fundamental knowledge and understanding related to long-term combating Weapons of Mass Destruction (WMD) needs.

This position is on-site at the Defense Threat Reduction Agency (DTRA), and is not a lab research position, incorporating neither laboratory time nor academic research. Specifically, the position is within DTRA’s Research and Development Enterprise, Basic and Applied Directorate.

**Requested Start Date**:

January 2012