

Principal Investigator Job Description

The Principal Investigator (PI) has primary responsibility for the creation of research and development proposals and authority over the execution of projects including research outcomes, engineering accomplishments, transition and budget oversight. Publishes study results as first author or co-author. This position requires personal initiative to accomplish technological innovation and creativity in support of new business development. PI serves as the primary programmatic liaison with the sponsor.

Duties and Responsibilities

- Lead, and collaborate with others, both within and outside SoarTech, to develop successful research and development proposals for external funding that align with SoarTech's strategic direction
- Lead, and collaborate with others, both within and outside SoarTech, in the translation of scientific research into engineering practice
- Disseminate findings through peer-reviewed publications, presentations at scientific and community meetings, internal and external seminars, and other venues
- Provide leadership and management of research projects
- Develop a program strategy and implementation plan including short and long term goals and objectives for research programs
- Stay current in area of research interest through reviews of the relevant literature and participation in industry-wide forums and discussions
- Pursue a technology strategy in support of company initiatives that satisfy both specified and unspecified sponsor needs, and that support stakeholders ranging from end users to high-level decision makers
- Create and nurture large-scale and long-term opportunities by understanding sponsor funding profiles and how they are likely to change during the next several years; develop an accurate assessment of high-probability funding opportunities
- Provide consultation, review or co-investigator collaboration on colleagues' projects and studies, as well as mentorship to junior level investigators
- Location can be flexible; some travel will be required
- Performs other duties as assigned

Specific Research Areas at SoarTech

We are currently seeking PIs for multiple business areas at SoarTech. Those business areas are as follows.

Intelligent Training Systems and Serious Games:

- Individualized game-based training: intelligent tutoring systems, student assessment, student modeling, design and development of serious games, and related topics
- AI for games: tactical behavior modeling, human social cultural behavior modeling, and related topics

Unmanned Platforms and Robotics:

- Autonomy: intelligence for autonomy; strategic, mission, and tactical behavior modeling; world modeling; and related topics.
- Human-machine interaction: development of intuitive, multi-modal interfaces; shared situation awareness; and related topics

Data to Decisions:

- Synergistic human-computer systems: hybrid reasoning, abductive reasoning, supervised learning, computer cognition, graph theory, pattern recognition, and related topics

- Command and Control (C2) functions including: sensor exploitation, data fusion, behavior models, decision-making, reasoning under uncertainty, prediction, and related topics.

Required Skills and Experience

- Ph.D. or equivalent level degree
- Familiarity with and insight into direction of DoD research community; ability to help position SoarTech for growth in that industry specifically including DARPA, ONR, AFRL and/or RDECOM.
- Ability to integrate ideas from multiple disciplines
- Familiarity with the DoD research community players, processes and procedures (e.g., the DARPA and IARPA competitive BAA processes) including experience as PI on a major program
- Established record of research accomplishment, including a history of obtaining significant external funding in the DoD research community
- A strong first author publication record in peer-reviewed journals with demonstrated expertise in an established area of research interest
- Experience in developing effective collaborations with academic and industrial partners
- Background in technical or scientific field such as robotics, training, ISR exploitation, decision making or other application areas relevant to SoarTech including a background in artificial intelligence (AI), cognitive architectures, or related technologies
- Experience with contracts and other legal documents desired, including experience in federal government acquisition process
- Demonstrated professional maturity
- Excellent communication skills, including facilitation, negotiation, and collaboration
- Leadership, mentoring, and other skills needed to lead teams and to work with subcontractors and prime contractors to accomplish common goals
- Applicants selected will be subject to a Government security investigation and must meet the eligibility requirements for access to classified information; eligibility requirements include US citizenship

Please email jobs@soartech.com to express interest in this role.