Artificial Intelligence Engineer (AIE) Job Description

At SoarTech, our focus is in the development of artificial intelligence (AI) that reasons like humans do, to automate complex tasks, simplify human-machine interactions, or model human behaviors. Our philosophy is three-fold: to be an augmentation to, not a replacement of, the human; to think “top-down, not bottom-up;” and to be transparent so that decisions and processing are communicated to the human and in human-like terms. SoarTech is growing and we are looking for individuals interested in helping research, develop, and implement this exciting technology into everyday operations.

We are looking for both entry and senior level AI engineers to help us tackle the following tough problems:

- Intelligent software behavior models for simulations and game environments.
- Interactive virtual assistants and teammates that can interact naturally with humans, through speech and other modalities, without requiring an active Internet connection or existing commercial service.
- Algorithms and methodologies for dynamically assessing user state and competence, and personalizing their experience in response to that assessment.

We are seeking skilled problem solvers with good software design and programming skills and expertise or knowledge in various areas of machine learning, natural language processing, game development, autonomous systems, computer vision, user interface development, data analytics, and human behavior modeling. Engineers at SoarTech participate in all phases of development and are given opportunities to learn and advance ideas, technologies, and software products.

We are currently seeking research scientists for our Intelligent Training business area:

**Intelligent Training**

As military operations become more complex and training budgets shrink, it is increasingly challenging to prepare warfighters for complex, interactive, cognitively demanding work. SoarTech is addressing this challenge by developing descriptive and generative cognitive and behavior models; by developing and applying AI and machine learning to enable environments to tailor and to individualize experience; and by creating engaging, simulation- and game-based training systems for everything from tactical skills to social skills. Our AI technologies and systems are a force multiplier for instructors, students and users.

**Duties and Responsibilities for AI Engineers:**

AI engineers contribute to research and development projects by working closely as part of a project team that is responsible for developing AI technologies that solve sophisticated problems.

- AI Engineers are expected to implement algorithms, knowledge bases, complex logic, and other AI technologies into new and existing systems.
- Design, document, implement, debug, and test software.
- Understand software system specifications and recommend improvements, this includes understanding the implications of system-level decisions and how to mitigate and leverage them.
- Participate in integrated test sessions with industry partners, academia and customers/sponsors.
- Performs other duties as assigned.

**Required Skills and Experience:**
Demonstrable expertise (BS/MS preferred but not absolutely required) in engineering, computer science, mathematics, physics, or a related discipline or equivalent experience.

- Highly proficient at designing and implementing software/AI components in Java, C++ or Python.
- Ability to analyze and solve challenging technical problems.
- Excellent written and verbal communication skills.
- Ability to travel to support technical presentations, testing, and integration.
- For more senior candidates: demonstrated leadership, mentoring, and other management skills needed to support teams and to accomplish common goals.
- Programming and technical problem-solving exercises will be administered for candidates during an on-site interview.

Preferred Skills (Not Required):

- A bachelors or advanced degree in computer science, AI, deep learning, robotics, or a related discipline or equivalent experience.
- Machine learning algorithms including deep learning, neural network design, deep reinforcement learning and computer vision.
- Natural language processing and speech recognition systems and algorithms.
- Hardware development including microcontroller board design, physical sensors, computer assembly and customization.
- Intelligent user interfaces including experience with speech, sketch and gesture recognition and other interaction technologies.
- Distributed simulations (e.g. HLA, DIS) and simulation systems (e.g. NGTS, OneSAF, AFSim).
- Decision support systems.
- Sensor and data fusion.
- Simulation and game development.
- Software testing methodologies and tools.
- Experience in design and debugging of asynchronous (e.g. multi-threaded) components.
- Experience supporting development projects for defense or aerospace technology platforms.
- Active duty military experience.

Security Requirements:

- Ability to obtain and maintain a Security Clearance (Security clearances require U.S. citizenship and a background check clear of felony convictions.)

Soar Technology offers a full package of benefits and competitive salary, flex time, excellent group medical, vision, and dental programs. At SoarTech, we continuously invest in the development of your skills by providing budgeted time for technical skills development for all of our engineers.

Soar Technology, Inc. is an equal opportunity employer. Applicants selected will be subject to a Government security investigation and must meet the eligibility requirements for access to classified information; eligibility requirements include U.S. citizenship

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