



Capabilities Statement

HusmannTechnologies, LLC
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Corporate Data

DUNS: 787095970
Certifications: VOSB
CAGE: 4S6T1
NAICS: 511210, 519130, 519190, 541330, 541511, 541512, 541519, 541611, 541712, 541990, 611420, 611430, 611,691, 611710

Core Competencies

HusmannTech is an incorporated development, training and simulations entity focused on providing project management training, services and solutions. We provide solutions to the warfighter that require an understanding of the mission and the effective application of emerging technologies. Our solutions effectively integrate innovative solutions in AI with project management, application development, cyber compliance, organizational integration and lifecycle management to provide the warfighter with the tools needed to fight and win the battles of today and tomorrow. The application of our technology is directed toward increasing shared understanding and reducing the cognitive load across organizations by automating individual and group decision making of complex, ill-defined problem via the use anti-fragile (resilient) cognitive/learning systems. Through the use of effective use of multiple agents that use Deep Learning (both supervised and unsupervised), our solutions provide timely insight and understanding at any point along the kill chain (USAF) or the military decision-making process (Army).

- **Core research areas (RA):**
 - RA1: Distributed Intelligence: Establish the theoretical foundations of multi-faceted distributed networked intelligent systems combining autonomous agents, sensors, tactical super-computing, knowledge bases in the tactical cloud, and human experts to acquire and apply knowledge to affect and inform decisions of the collective team,
 - RA2: Heterogeneous Group Control: Develop theory and algorithms for control of large autonomous teams with varying levels of heterogeneity and modularity across sensing, computing, platforms, and degrees of autonomy, and,
 - RA3: Adaptive and Resilient Behaviors: Develop theory and experimental methods for heterogeneous teams to carry out tasks under the dynamic and varying conditions in the physical world.
- **Primary tools and techniques** (artificial intelligence agent based systems to facilitate both cognitive and linear workflows):
 - Messaging middleware structure and workflows (XMPP, DIB and the Joint Command, Control and Consultation Information Exchange Data Model (J3IEDM)),
 - Self-similarity monitoring,
 - AI/Neural Network system of systems,
 - Genetic Algorithm (GA) system of systems, to include agent training and simulations,

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- FIPA-compliant multiple agent systems,
 - The development and life cycle management of simulated models, training and POC, using DISA IASE compliant workflows and processes, and,
 - Fuzzy Control systems.
- **Domains of expertise are:**
 - Cyber infrastructure and transport,
 - Full spectrum theater operations (Joint level and below),
 - US Army multimodal theater logistics,
 - System resiliency, and,
 - Staff operations (Mission Command), decision making and the Common Operational Picture (COP).

Past Performance

- Principal of Husmann Technologies served as Project Management for a NETCENTS-2 Base Infrastructure and Transport Upgrade for multiple MAJCOMs across multiple CONUS USAF bases.
- Provided Distributed Modeling & Simulations Project Management to enable the distributed training for the US Army Reserves and DA 3/5/7, reducing costs by over \$10,000,000 per year.
- Provided Exercise Project Management and coordination for over 90 Brigade and above Live Virtual and Constructive (LVC) Command Post Exercises for the US Army Reserves and PEO-STRI.

Differentiation

- **Effectively supporting the warfighter.** Husmann Technologies, a Veteran owned small business, knows results matter. With 80% of our core leadership team each having over 15 years' service in uniform, know lives and resources are on the line.

Husmann Technologies uses established processes and a continuous learning program that ensures our capacities and capabilities meet task orders and CDRLs, while remaining cost-effective. We believe that even the best idea cannot come into existence without effective policy, management, control and support. The majority of our team members has an average of 10 years in their field and applicable credentials, such as PMP® and CISSP. Both our routine and innovative solutions are designed using OSD AT&L and Air Force Life Cycle Management Center (AFLCMC) methodologies, minimizing contract risks and ensuring effective movement across the TRL spectrum.

- **Delivering results with experience, processes and the effective application of disruptive technologies.** When designing a solution, we engineer a solution that can support the current and future mission of the warfighter; to do this, we draw on our experience in DOTMLPF development processes, such as the Joint Capabilities Integration and Development System (JCIDS), Program Objective Memorandum (POM) Development, Total Army Analysis, Doctrine and Training Development, and standards, such as the J3IEDM and other models; we then determine the core issues and integrate our tools and techniques to provide the best value solution to the customer. Our solutions are also designed to provide capabilities and capacities that support the missions of Theater Commanders at SOUTHCOM, USPACOM, CENTCOM, EUCOM, AFRICOM and NORTHCOM.