



3120 Fairview Park Drive
Suite 800
Falls Church, VA 22042
www.karthikconsulting.com

KARTHIK CONSULTING
Beyond the expected

AT A GLANCE

Modernize Smart Installation and Community Dashboard (SICD) for U.S. Military Bases – Military and Civilian Applications



KEY STATS

- Prime systems integrator to support Army Installations Strategy (AIS) through Smart installation and Community Dashboard (SICD) program.
- Develop gateway applications to manage routing of data and business logic between key base and community services, including business community.
- Develop AI solutions to monitor base traffic and weather alerts – smart community approach to military/civilian integration on base environment.
- Design hardware and software platforms necessary to ingest and output an automated data management system across base installations and to GovCloud to support the goal of allowing technology to detect system faults which would lead to energy waste incidents, weather-related risks, or security breaches.
- Provide IAM/Security development and administration services to support US Ignite Smart-Base Programs.
- Prepare Dev/Sec/Ops level and CI/CD Security processes.
- Key areas of focus include: public safety on base, transportation logistics, integration of advanced cloud computing, apply machine learning and unmanned systems technologies into base and civilian integration protocols.

KC CUSTOMER IN FOCUS:

US Ignite collaborates with smart communities and research testbeds to drive high-impact solutions to tough challenges. Operating like a high-tech startup, the organization delivers timely results by applying technical expertise, stakeholder engagement, and targeted tools. US Ignite works tirelessly to ensure programs are effective and reach the communities that need them the most.

US Ignite is the governments' official Smart Base partner, working in collaboration with the National Science Foundation (NSF) and a host of public and private sector sponsors to modernize military installations through their Smart City/Base methodologies, where there is equal focus between military and civilian life and operations within the base environment.

US Ignite selected KC to fulfill the role, and critical responsibilities, as the Prime Systems Integrator to assist in the IT and Cybersecurity modernization of installation capabilities across the US Army Enterprise – specifically Fort Benning, GA and Fort Carson, CO.

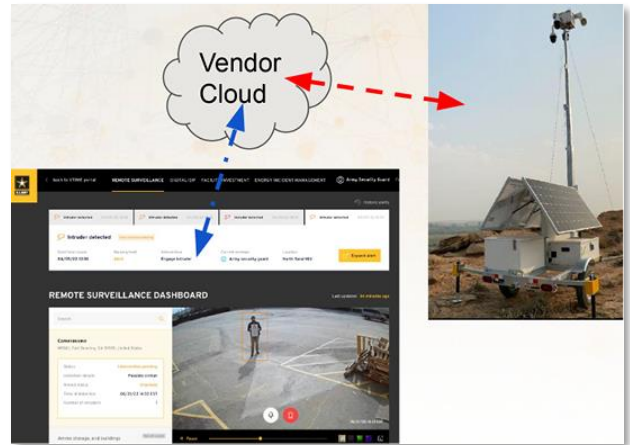
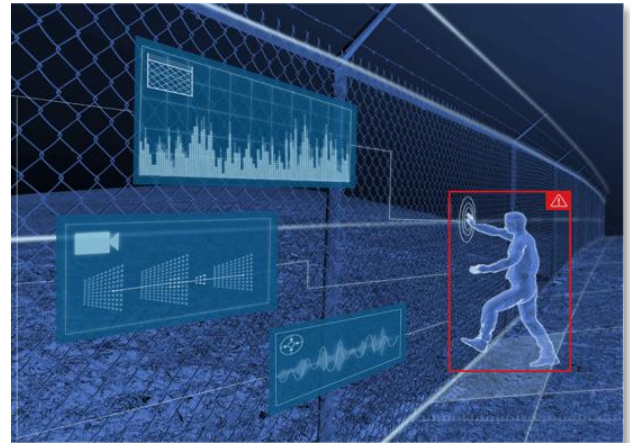
SIGNIFICANCE OF REQUIREMENTS:

Safety (military and civilian), operational efficiency, and risk-management in an environment of constant preparedness are primary focus areas across all military base installations. As base operations continually expand in capabilities and requirements to ensure optimal operations, new technology solutions were needed to modernize capabilities in the areas of personnel support, mission readiness, data analytics and reporting, and deployment of AI to help identify/assess/mitigate risks – including inclement weather decision support, surveillance systems, energy use efficiency.

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KEY AREAS OF KC IMPACT:

- Create AI system to identify issues/anomalies in building automation programs, such as HVAC, lighting, other energy systems. Based on level of severity, establish SMS notification system to trigger action by key base stakeholders.
- Design data engineering approach to identify when key energy facilities show patterns of underutilization. Based on levels of sustained underutilization, develop algorithm to estimate potential cost savings by maintaining lower levels of usage through power-down process.
- Designed system of sensors to track inbound/outbound traffic on base. Developed set of metrics to improve traffic flow through improved processing time at gates.
- Support all subsystem integration and test activities once subsystems are developed and maintained in a secure cloud environment.
- Develop protocols and lead teams through processes of securing AI generated authorizations to deploy action when certain threshold markers have been exceeded.
- Establish failover policies and autoscaling of analytical services so that continuity of analyses can be maintained when other systems fail.
- Through IT systems and deployment of weather sensors, effectively (and proactively) manage heat risk situations and setup systems of notifications and alerts (for weather operations manager) when weather conditions put soldiers and/or civilians at risk within the base environment – across all microclimates.
- Deploy self-contained intelligent video surveillance system to edge-process optical and thermal imaging to detect and alert law enforcement of the presence of unauthorized soldiers, civilians, or vehicles – real time.



ABOUT US

Karthik Consulting was founded in 2008 to be a reliable and trusted advisor for our customers, providing independent, unbiased, and proven solutions that mitigate risk and help solve enterprise-wide IT challenges.

Our Cyber Security, Software Development and Program Management focus areas (and work methodology) ensure that we can deliver not just solutions, but architecture that scales and grows with the customer's needs over time. We are able to assist in projects ranging from short advisory engagements to assembling a full team to deliver a solution from concept through implementation and on-going management. KC has access to industry experts in various technologies and teaming partners to meet any of your IT challenges. The vision of KC is to bring the innovation, passion and agility of the commercial IT industry to meet the unique challenges of the federal government. We are a DOD Cleared Facility with a DCAA-approved accounting system.

CONTACT

Felix Martin, 571 435 7632
fmartin@karthikconsulting.com

CAGE: 56GH3
DUNS: 828199880
UEI: FGNNM7KNUPF6

PRIME CONTRACT VEHICLES:

GSA STARS III 8(a)
GSA MAS
GSA OASIS Pool 1 and 3
NIH CIO-SP3 8(a) & SB
Air Force SBEAS
Army RS3
Navy Seaport-NexGen
FAA eFAST



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