ENGINEERING

IntelliGenesis LLC® pioneers innovative AI/ML-based analytic capabilities that help our IC and DoD customers keep pace with the most pressing real-world challenges posed by our adversaries. IntelliGenesis engineers and developers are industry experts familiar with applying the latest technologies on public and private cloud platforms, onpremise deployments, edge devices, and developing new applications. Our Agile-based process encourages customer and user engagement within each development sprint to provide direct input and feedback, ensuring our products meets expectations at every milestone.

ENGINEERING SERVICES & CAPABILITIES

» CLOUD ANALYTICS

Scalable analytic solutions to increase the usability and intelligence potential of extremely large cloud-based datasets. Advanced queries and correlation of data from disparate sources to expand data accessibility for analysts and create new intelligence, all while maintaining security compliance for sensitive information.

» AI & ML DEVELOPMENT

Custom models aimed at easing the burden of data processing and intelligence generation using a wide range of AI/ML techniques (supervised/unsupervised learning, deep learning, neural networks, clustering, random forest, and more). Natural Language models to understand, evaluate, and respond to human composed texts and fully automate applications.

» MODELING & SIMULATION

Advanced cyber-physical modeling capabilities to create digital twins, cyber ranges, and opposing force/threat emulations for a wide variety of use cases: red/blue/purple team exercises, systems engineering and testing activities, analyses of alternatives, and more. AI/ML-enabled M&S environment generation expedites deployment timelines.

» CYBERSECURITY & APPLICATION OPTIMIZATION

Automation of critical cybersecurity functions like anomaly detection, trend analysis, threat attribution, and other applications to increase accuracy and automation, decreasing manual intervention and monitoring.

» MISSION ENGINEERING

Full-lifecycle Agile-based development and engineering services to create novel solutions, tools, and applications that solve customers' most complex problems. Mission-critical 24/7 support during operational deployments.

ANALYTIC TOOLS & PRODUCTS

CYBERSPAN®   **KRAKENAI**™   **NeuralNexus**™

» CYBERSPAN® - AI-ENABLED ANOMALY DETECTION AT THE BOUNDARY

Protection against malicious and anomalous activity at network boundaries. Supervised and Unsupervised AI Learning Models provide fundamental cyber protection and reduce the cybersecurity burden for small-to-medium sized Defense Industrial Base (DIB) companies.

» KRAKENAI™ - GENERATIVE AI FOR CYBERSECURITY

Generative AI, Full Stack (FS), End to Edge solution tailorable to any application/market. In its current iteration, KrakenAI is a Cognitive-based tool, specifically targeting the cybersecurity marketplace to enhance analyst capabilities through a conversational and summarization-optimized Large Language Model.

» NEURALNEXUS™ - MACHINE LEARNING AS A SERVICE (MLaaS)

Customizable, AI/ML-enabled tools, workflows, and dashboards that make any sensor smarter. Data-agnostic AI integration supporting real-time threat detection, active prediction capabilities, behavior analysis, data management, vulnerability assessment, and more.

ENGINEERING CONTRACT VEHICLES

For more information or to order from these contracts:

» AI Talent 2.0 Basic Ordering Agreement (BOA)

The AI Talent 2.0 contract vehicle aims to enhance data, AI, and digital solutions across the DoD by establishing a robust foundation for scalable development and deployment. This includes ensuring the DoD has the essential personnel, platforms, and processes to deliver agile solutions to business leaders and warfighters.
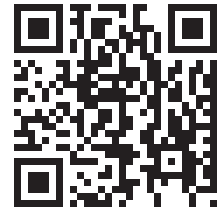
» DoD Cyber Crime Center (DC3) Enhanced Cyber Defense Sensor Program

The DC3 contract vehicle was established to protect Defense Industrial Base (DIB) networks from persistent and sophisticated cyber threats targeting critical defense information and national security interests.

» SBIR/STTR Research and Development

The DoD Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs provide small businesses with Research and Development funds to explore new technologies with both DoD and commercial potential. Through these programs, IntelliGenesis has fostered multiple dual-use products like CYBERSPAN and KRAKENAI from initial concept to development and deployment. Customers may easily issue sole source Phase III contracts for existing technologies developed under these programs.

CORE TECHNOLOGIES

- AWS
- Jira
- Git
- PyTorch
- Docker

- Confluence
- AngularJS
- Java
- Python
- Keras

- Apache Spark
- Numpy
- Oracle
- Apache Tomcat
- MySQL

- NodeJS
- TensorFlow
- Splunk
- React
- Scikit Learn