# BLUEHALO

IARPA BENGAL Lightning Talk

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# Company Snapshot

## Our Solutions

BlueHalo is purpose-built to provide industry leading capabilities in our mission domains.

Space Technologies

Directed Energy, Counter-UAS (c-UAS), Unmanned Systems (UxS)

Missile Defense

C4ISR

CNO

Multi-INT

AI/ML

Autonomy & AI/ML Mission

Healthcare

BlueHalo provides specialized operational support, services, and technology to plan, design, develop, and execute critical missions in the national security community.

BlueHalo provides deployable analytics, machine learning, and applied artificial intelligence solutions as well as cutting-edge robotic platforms, autonomy, and human-machine interfaces.

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# Expertise and Experience

*Established record of R&D and transition. These include:*

- AI / ML
- Multi-lingual NLP/NLG/NLU
- Specialized LLMs for DoD and IC
- Large-scale Data Collection
- MLOps / DevSecOps
- Machine Learning Engineering
- System Integration
- Productization of basic research
- Human-in-the-loop AI/ML
- Applied NLP/NLG for OSINT/SIGINT

## Ongoing programs

- 5 IARPA Programs including
  - SMART, WRIVA, SINTRA
- ONR Counter Information Warfare
- USDI/CDAO Mission Analytics

## Prior Programs

- OSD/ONR/ARL Data-to-Decisions (D2D)
- NASA Trusted Data Analytics for NAS
- SBIRs for GANs and ML Security/Privacy

## Analytics Software

- Scraawl (scraawl.com)

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# Expertise and Experience

## Core Capabilities Relevant to BENGAL

- Mission Relevant NLG/NLP – OSINT, SIGINT, DOMEX NLG/NLP solutions that utilize both LLMs and traditional NLP
- Multilingual Multidomain Data Collection – Large scale, multi-lingual data collection from Social Media, RSS feeds, academic documents, websites, audio/video text etc.
- Adversarial machine learning, machine learning security and privacy for mission analytics
- Proven records of delivering high-TRL solutions to DoD and IC

## Teaming Relationships Sought for BENGAL

- Potential collaboration sought for BENGAL with academic / small business partners.

## Differentiating Capabilities Relevant to BENGAL

- IC and DoD NLP/NLG relevant mission/domain expertise
- Specialized LLM models for missions (e.g., creating long and short-form text)
- In-house air-gapped GPU Cluster – 6 x (8 x 48 GB GPU)
- ML security and privacy for AI/ML for multi-modal data
- Track record of transitioning from basic research to high TRL 7+ solutions

## Contact Information

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