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NGA, NSIN announce illegal fishing challenge phase one finalists

SPRINGFIELD, Virginia – The National Geospatial-Intelligence Agency and the National Security Innovation Network announced 10 finalists for phase one of the \$1 million Global Fishing Forecast Grand Challenge, launched in January. The NGA-NSIN challenge, designed to identify new ways to forecast industrial fishing, will be used to help combat illegal, unreported and unregulated fishing activities.

“Knowing where industrial fishing may occur in the future provides an advantage when allocating limited resources, ranging from maritime enforcement to space-based observing systems to detect and track vessels of interest that may be involved in IUU fishing,” said Mike Brady, NGA research scientist and forecast grand challenge program manager.

During phase one of the challenge, an interagency panel of subject matter experts selected ten finalists after completing a double-blind review of proposed forecast methods and written concepts of operations. The proposed methods included a range of potential solutions incorporating novel data sources, data visualization, risk analysis, remote sensing, and artificial intelligence and machine learning. The finalists each received a \$25,000 cash prize.

In phase two, beginning May 20, the finalists will pitch their full solutions directly to the interagency judging panel, which will select first-, second- and third-place winners in early summer. First place will receive \$500,000, second place \$200,000 and third place \$50,000.

Selected to advance to phase two are:

- **Allen Institute for Artificial Intelligence:** Specializes in AI R&D in multiple sectors, including maritime; created by the late Paul G. Allen, cofounder of Microsoft
- **Athenium Analytics:** Leverages AI-enabled imagery analytics, predictive models and proprietary risk scores to identify and manage risk
- **Esri:** Takes a geographic approach to problem-solving by using geographic information system software, location intelligence and mapping
- **Jataware Corp:** Provides technology research and builds digital solutions for a wide range of problem sets within government and commercial spaces

- **Orbital Insight:** Uses AI-powered geospatial analytics and location data to query type of activity, where and when it happens
- **PierSight LLC:** Develops specialized airborne and spaceborne SAR-based imaging solutions for persistent ocean surveillance
- **PolArctic LLC:** Employs artificial intelligence and machine learning techniques to plan future maritime activities, primarily in the Arctic
- **Misram LLC, in collaboration with Reverie Venture INC:** Conducts R&D to push innovation in 5G, mobile edge computing, cognitive networking, and AI-driven video and data analytics
- **Sync Layer, Inc.:** Leverages data visualization technology to provide comprehensive analysis of large volumes of data
- **University of Miami CSTARS:** Uses civilian synthetic aperture radar, electro-optical and other remote sensing satellite data for environmental monitoring of hurricanes, volcanoes, landslides, and other natural or manmade disasters

IUU fishing is a key contributor to the decline and potential collapse of fisheries, threatening the stability of economies, food systems and ecosystems regionally and worldwide.

“The novel methods put forward by these finalists introduce fresh approaches for development of new capabilities,” said Ronzelle Green, Ph.D., director of NGA Research and Development. “The ability to forecast industrial fishing will help NGA and its customers anticipate IUU fishing and inform proactive measures to combat it.”

The Global Fishing Forecast Grand Challenge is part of NGA’s larger focus on using commercial techniques to augment maritime domain awareness. NGA just launched a commercial solutions opening pilot to provide direct-to-warfighter commercial techniques for identifying, monitoring and tracking illicit maritime vessel activity in the U.S. Indo-Pacific Command area of responsibility. The goal across both of these efforts is to accelerate NGA’s ability to monitor and track current activity, and to also forecast potential future activity to help ensure our customers, partners and allies can direct resources appropriately for combating illicit maritime activities.

More information about the prize challenge is available [here](#). More information about the CSO is available [here](#).

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About NGA

NGA delivers world-class geospatial intelligence that provides a decisive advantage to policymakers, warfighters, intelligence professionals and first responders.

NGA is a unique combination of intelligence agency and combat support agency. It is the world leader in timely, relevant, accurate and actionable geospatial intelligence. NGA enables the U.S. intelligence

community and the Department of Defense to fulfill the president's national security priorities to protect the nation.

For more information about NGA, visit us online at nga.mil, [Instagram](#), [LinkedIn](#), [Facebook](#) and [X/Twitter](#).

About NSIN

NSIN is an unrivaled problem-solving network in the U.S. Department of Defense that adapts to the emerging needs of those who serve in the defense of our national security. We are dedicated to the work of bringing together defense, academic and entrepreneurial innovators to solve national security problems in new ways.

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