str SYSTEMS &TECHNOLOGY RESEARCH

Harnessing The Power Of Technology To Solve The Nation's Hardest Problems

STR specializes in advanced research and development for defense, intelligence and homeland security applications, primarily but not exclusively in sensor and information processing technologies. Our expertise includes:

- Sensor Development
- Sensor Signal Processing
- Electronic Warfare
- Computer Vision
- Social Media Processing

- Cyber Defense
- Data Analytics
- Command and Control
- Precision Navigation

STR is organized into technology groups, each focused on the development of capabilities employing common technologies and staff expertise. We leverage this broad set of skills across the groups to tackle the development of multidisciplinary sensor and information processing systems.

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We Offer Extensive Expertise in Hardware and Software Development, Including Agile Methodologies.

ADVANCED SYSTEMS DEVELOPMENT

STR's Arlington VA office works a broad range of technical programs in the heart of the Washington DC area near many DoD and IC customers. These programs range from maritime to space applications, with emphasis on concept development and exploration, system architecture design, through prototype evaluation and testing. This location allows STR to tap into the experience and talent across the DC region which, coupled with the strength of STR's other locations, allows STR to satisfy the full spectrum of national security applications.

ANALYSIS & DECISION SYSTEMS

At STR we apply diverse technologies for domain modeling, machine learning, and automated reasoning to create practical software-based systems that help people understand complex data and make good decisions.

CONTROL & ESTIMATION SYSTEMS

As systems become more automated, they need to operate in challenging and often unpredictable environments. At STR we are developing tools that leverage statistical estimation, optimization and control, and physics-based sensor modeling that enable autonomous systems to achieve mission success in the face of significant uncertainty.

INTELLIGENCE TOOLS & APPLICATIONS

Over the past decade, Intelligence, Surveillance, and Reconnaissance (ISR) have emerged as key enablers for most warfighting operations. STR applies our expertise in machine learning, statistical inference, graph analytics, and operations research to get the most out of the nation's intelligence data.

SENSORS & SIGNAL PROCESSING

STR's experienced team employs its skills and expertise in sensor systems, signal processing algorithms, and real-time embedded computing to design, develop, and deliver solutions for national security applications.

VIDEO & IMAGE UNDERSTANDING

STR researchers and engineers are developing and applying innovative and practical computer vision algorithms for extracting actionable information from diverse sensor data for challenging defense and security applications.

STR is dedicated to fostering a diverse and inclusive workforce where all employees, regardless of race, ethnicity, gender, neurodiversity, or other personal characteristics, feel valued, included, and empowered to achieve their best. We recognize that each employee's backgrounds, experiences, and perspectives are essential for providing our customers with innovative solutions to challenging national security problems. STR's commitment to attracting, retaining, and engaging talented and diverse professionals is demonstrated by our participation, sponsorship, and support in local and national minority organizations.