

TRANSFORMING INNOVATION INTO PRACTICAL AND SUSTAINABLE SOLUTIONS

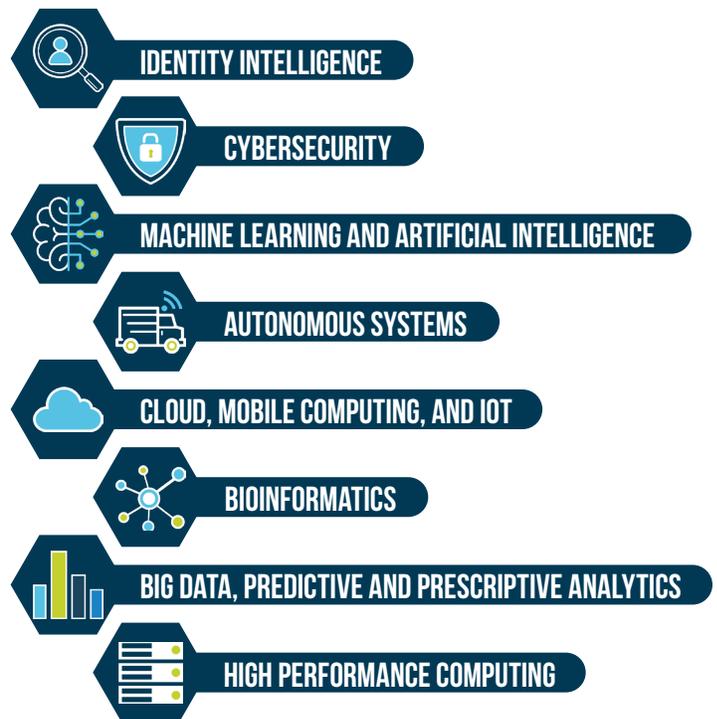
Noblis' internally funded research program is driven by government missions and fuels solutions to our Nation's most critical challenges



The Noblis Sponsored Research (NSR) program is an essential part of corporate life at Noblis. Our yearly investment in this program, along with our ethical practices, is part of what makes us a unique nonprofit organization. Noblis research generates sound, sustainable solutions with enduring impacts.

Our NSR projects demonstrate the art of the possible to our clients. Our research enables us to create new intellectual capital and capabilities and to develop new models that will help us solve the critical problems our Nation faces now and into the future. Noblis research allows us to expand staff capabilities and provides a rewarding outlet for the inventive spirit found throughout Noblis.

To foster collaboration and continued improvement we use a web-based tool available to all members of the Noblis community where teams can exchange ideas with peers to solve client challenges. Through this "Ideation" process, each year we invite all staff to propose new projects that will be considered for corporate funding in areas most impactful to our clients.



RESEARCH IN PRACTICE

The following examples are just a few of the Noblis innovations fueled by our research. These accomplishments represent advancements in science and technology, and more importantly they directly contribute to our clients' mission performance.

ORCHESTRATED AUTONOMY: INTEROPERABILITY OF CONNECTED VEHICLES

The Noblis Pieces of Eight (Po8) concept orchestrates the actions of unfamiliar, connected and autonomous machines. It enables nearby connected machines to share situational awareness of obstacles and threats projected over time and to collectively plan motion paths and other actions that avoid collisions or conflicts. The award-winning Po8 concept enables systems of autonomous machines to operate safer, more productively and more equitably.

DATA SCIENCE AND MACHINE LEARNING: SEARCHING UNSTRUCTURED DATA

Noblis' Versatile Ontology Research (VÖR) solution is a multi-faceted system that extracts and discovers content from unstructured data sources. Noblis uses VÖR to fuse its background in data science, machine learning, and intuitive user interfaces with real world input from analysts to solve the unstructured data problem facing many missions.

BIOMETRICS AND IDENTITY INTELLIGENCE: LARGE SCALE FACIAL RECOGNITION

Noblis invented methods and solutions to match a single facial image against a 100 million-image database in one second. Our graphical analytics capabilities produced large social networks of facial image relationships from a large-scale set of photographs with multiple facial images. Our research was initiated in response to challenges such as the post-Boston marathon bombing investigation.

DATA ANALYTICS AND BIOINFORMATICS: KEEPING FOOD PATHOGEN FREE

Noblis enhanced national food safety by delivering high-quality bioinformatics capabilities to the food industry, which demonstrated an immediate, high impact use-case for bioinformatics to keep food pathogen free. Noblis applied its high performance computing expertise, data hosting infrastructure and genomic analysis solution, BioVelocity, to meet this critical public health safety challenge.

R&D PORTFOLIO MANAGEMENT: MAXIMIZING VALUE AND REDUCING COST

Noblis is a leading provider of acquisition and R&D portfolio management for the federal government. Our nVision solution addresses these specialized requirements. Agencies can streamline workflows and transform the way they manage projects from inception to completion with this secure cloud-based solution.

ABOUT NOBLIS

Noblis is a dynamic science, technology and strategy organization dedicated to creating forward-thinking technical and advisory solutions in the public interest. We bring the best of scientific thought, management, and engineering expertise together in an environment of independence and objectivity to deliver enduring impact on federal missions.

Noblis works with a wide range of government clients in the defense, intelligence and federal civil sectors. Together with our wholly owned subsidiary, Noblis ESI, we tackle the nation's toughest problems and enable our clients' most critical missions.