I³ IDEAL INNOVATIONS INCORPORATED

A TECHNOLOGY-DRIVEN IDENTITY SOLUTIONS AND SERVICES COMPANY

WE IDENTIFY

FACE CENTER OF EXCELLENCE (FaCE)

I³'s FaCE offers a multitude of services in the Facial Identification discipline.

MULTIPLE FACIAL IDENTIFICATION TRAINING (F.I.T.) CLASSES

I³ offers both virtual and in-person classes, which meet all levels of interest and experience in comparing facial images from the curious beginner to the professional examiner. Topics include bone, muscle, dermatology, aging, and hair. All classes provide the participant time to apply what is learned during the lecture to comparison exercises. We have trained:

- Federal Bureau of Investigation (FBI)
- Defense Forensic Science Center (DFSC)
- DHS Office of Biometric Identity Management (OBIM)
- National Security Agency (NSA)
- National Ground Intelligence Center (NGIC)
- Naval Criminal Investigative Service (NCIS)
- National Counterterrorism Center (NCTC)
- Defense Manpower Data Center (DMDC)
- Australian Federal Police and other Australian agencies
- Swedish Migration Agency
- NCIS Norway
- Romanian Intelligence Agency
- Northern Virginia Regional Information System (NOVARIS)

- Naval Information Warfare Center (NIWC)
- Belgian Federal Police
- Michigan State Police
- LA Sheriff's Department
- Costa Rican Government
- West Palm Beach Police Department (PD)
- Seattle PD
- Denver PD
- NEC
- Target
- Forensic Artists
- Odontologists
- Anthropologists

EXPERT CONSULTING & WITNESS SERVICES

I³ provides unbiased support for any request for comparison of facial images for attorneys (both prosecution and defense), historical photograph examinations, and missing children. We also provide expert witness testimony services regarding comparisons conducted by I³ personnel.

FACIAL IDENTIFICATION PROFICIENCY TEST (FIPT)

I³ designed the FIPT for those who perform facial comparisons in their regular job duties either as a facial reviewer (one who adjudicates candidate lists) or a facial examiner (one who conducts a formal systematic facial comparison). Candidates are competent reviewers or examiners as determined by their respective agency, organization, or other entity. The test is accredited by the American National Standards Institute (ANSI) National Accreditation Board (ANAB) to the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17043:2021 standard.

BIOMETRIC SERVICES

I³ designs, develops and integrates next-generation biometric systems for the Department of Defense (DoD) and Intelligence Community (IC). We provide identity management system development, Automated Biometric Identification System (ABIS) development, systems integration and operation, access control systems, biometric device testing, and evaluation and pilot study support. I³ currently manages several complex, integrated systems for various DoD and IC customers.

ABIS DEVELOPMENT & SUPPORT

I³ provides end-to-end biometric software development, database administration, information assurance, and test & evaluation, as well as deployment support for real-world solutions in the United States (U.S.) and overseas. Our expertise also includes enterprise Operations and Maintenance (O&M) and training support.

OPERATIONS SUPPORT

I³ provides operational support to the DoD, Interagency, and International partners submitting to the DoD ABIS by operating a 24x7x365 Watch Desk, providing metrics reports and subject matter expertise to end users. Our Subject Matter Experts (SMEs) provide advice and guidance to DoD ABIS users as they develop their biometric programs to ensure successful interoperability through the major U.S. Government biometric repositories. I³ supports overseas contingency operations involving biometrics systems O&M, biometric collection and file processing. We operate, maintain and sustain national-level authoritative biometric repositories.

PRODUCTS

In conjunction with its affiliate company, Secure Planet, Inc., I³ recommends biometric products and provides customers with custom-developed solutions for identity management, access control, and standoff biometric identification by face, iris, heart and voice.

SOFTWARE DEVELOPMENT

I³ is an industry leader for multi-modal, biometric-based software development. Our development expertise spans a wide range of offerings, from quick-turnaround solutions that meet emerging mission needs, to complex projects requiring extensive integration. We employ a Top Secret/SCI cleared, in-house software engineering team with experience building software that ranges the full spectrum of project sizes and complexity, from large enterprise software and mobile applications, to small tools used to integrate project components. Our team developed a Defense Biometric Software Development Kit (SDK) to provide a Government-Off-the-Shelf (GOTS) SDK to support the ability to easily create, import, modify, and process ANSI/NIST-ITL biometric transaction files.

STANDOFF BIOMETRICS

- **Long-Distance Facial Recognition:** I³ offers a long-distance facial recognition capability that can leverage facial images captured via still imagery as well as streaming video. We have demonstrated man-portable facial recognition at distances in excess of 400m away from the target(s).

- **Medium Range Facial Recognition:** Our medium-range facial recognition capability allows us to process still camera and streaming video imagery. Distances range up to a few hundred meters from the target(s).

- **Iris Recognition:** I³ has deployed systems for standoff iris recognition out to 5m, and designed a system to operate at 40m.

- **Heart:** I³ designed, developed and demonstrated a man-portable system for heart biometrics using a standoff system to measure pulse response at distances up to 200m.

- **Voice:** I³ designed and developed a man-portable system for voice biometrics to collect audio recordings of the subject's voice at distances up to 200m.

FORENSIC SERVICES

I³ provides government organizations with laboratory operations and examination support, training, forensic research support, standards development, quality assurance guidelines, testimony, and laboratory management mentoring.

LABORATORY OPERATIONS

I³ provides forensic services in the following areas:

- Latent Print Processing and Examination
- Tenprint Examination
- Facial Identification
- Firearms and Toolmarks
- Explosives and Drug Chemistry
- Document and Media Exploitation (DOMEX)
- DNA
- Evidence Handling

EXAMINATION SERVICES

I³ provides latent print, tenprint, face, and iris examination services to federal, state, and local organizations. We currently support the DFSC Biometrics Operations Directorate (BOD) in Clarksburg, WV; the Department of Homeland Security's Office of Biometric Identity Management (OBIM); the FBI's Terrorist Explosive Device Analytical Center (TEDAC); and the U.S. Postal Inspection Service (USPIS).

FORENSICS TRAINING AND MENTORING

I³ provides training and mentoring to agencies in the U.S. and abroad. We provide training in the areas of fingerprints, face, DNA, DOMEX, firearms and toolmarks, chemistry, handwriting, evidence handling, photography, and laboratory management including equipment maintenance, quality control, and standards development.

FORENSICS RESEARCH

I³ provides scientific research and analysis, evaluations of the accuracy and reliability of forensic experts, and design and development of research software.

BACKLOG SUPPORT

I³ provides backlog reduction and surge support services in all forensic areas. Our team coordinates with the requesting agency to utilize their space for evidence processing and computer analysis at times during the day or night when the equipment is available for our team to work.

FACIAL IDENTIFICATION CONSULTING

I³ provides consulting services to attorneys, law enforcement, and private individuals in facial image comparison to determine if individuals in images or videos are the same or different. More information can be found on our Face Center of Excellence (FaCE) page.

SCIENCE AND TECHNOLOGY SERVICES

I^3 is a leader in providing hardware and software development, system integration, and test management services to the DoD, commercial entities, U.S. federal entities, and international customers.

ADVANCED RADIO FREQUENCY (RF) HARDWARE DEVELOPMENT

I^3 provides hands-on expertise for modeling, designing, developing, and testing sensitive compact RF transceivers ranging from board-level components to complete radar systems. Applications include detecting, classifying, and locating threats such as Unmanned Air Vehicles (UAVs) from their active and passive signatures. For Sensitive Site Exploitation (SSE) operations, we have developed lightweight, hand-held systems for detecting electronic devices.

Our hardware design capabilities include board-level design, shielding and enclosure design, power management, RF signal modeling, and optimization of size, weight, power and cost. For example, our team supporting the U.S. Army Research Laboratory (ARL) has hands-on experience with the Xilinx UltraScale+ RF system-on-chip (RFSoC) platform. I^3 engineers have taken RFSoC designs from the drawing board to field-tested systems at Technology Readiness Level (TRL) 6.

FIELD EVALUATION OF ADVANCED SENSOR SYSTEMS

As a core competency, I^3 performs field tests of systems that remotely detect IEDs, munitions, and other types of ground targets from mounted, dismounted, and airborne platforms. For ARL, the Defense Threat Reduction Agency (DTRA), and other DoD customers, we have directed tests with up to a dozen aircraft and multiple teams from Government and industry. We have tested dozens of optical systems for long-distance face recognition and other long-distance biometrics. Our expertise includes planning tests, fabricating and emplacing targets, managing test logistics and flight operations, and analyzing test data.

ARTIFICIAL INTELLIGENCE (AI)/MACHINE LEARNING (ML) TECHNOLOGY

I^3 provides expert developers for AI/ML capabilities, especially in the areas of computer vision, automatic target recognition, and biometric signature analysis. Our teams are working on projects as diverse as spotting and recognizing facial expressions, automatically detecting and classifying targets in radar and video data, and analyzing brainwave signals. From data wrangling and labeling to algorithm development and real-time implementation, our AI/ML team provides advanced development services using cutting-edge tools for efficient, effective solutions.

COUNTER-UNMANNED AIRCRAFT SYSTEM (C-UAS)

I^3 provides expertise in C-UAS capabilities for long-range detection, tracking, and classification of potential threats. Our solutions include a wearable UAS detection system as well as systems to pursue and engage UAS threats, capture them in-flight, and deliver them to safe locations for neutralization and forensic examination. Our solutions also include fire control algorithm development and analysis of countermeasure responses to threat UAS. These solutions include both moving and stationary platforms, and various countermeasure projectile types.

NEUROSCIENCE RESEARCH

I^3 develops neuropsychological signatures of human performance and team compatibility, aiming to identify, train, and optimize human potential. We develop methods to identify a person's knowledge and familiarity without the need for explicit questioning. Applications include finding signatures of elite performance potential, developing ways to improve human performance, finding neuropsychological foundations of collaboration, and optimizing team composition.

RAPID PROTOTYPING, INTEGRATION, AND TESTING

I^3 excels at quickly building prototype hardware-software systems for developmental testing and field assessments. From software mockups and design studies to hardware fabrication and vehicle integration, we have experience building multi-disciplinary teams to rapidly test new technology concepts.

INFORMATION TECHNOLOGY (IT) SERVICES

I³ provides a range of IT expertise and capability typically found in larger companies, but with the partnership and attention you expect from a small company. Our personnel are Security+ Certified, Secret-cleared, and complaint with DoD Directive 8570.01. We provide Information Assurance (IA), network and system administration, software engineering, cross-domain solutioning, configuration management, and helpdesk services as part of our suite of IT offerings.

IT ACCREDITATION & RISK MANAGEMENT FRAMEWORK (RMF)

I³ has successfully led U.S. Government clients through the IT accreditation process, with expertise in virtualization and information assurance, having accredited and re-accredited Government systems under the RMF. We assist in all aspects of the RMF process, which involves the identification, implementation, assessment, and management of cybersecurity capabilities and services.

COMMAND CYBER READINESS INSPECTIONS (CCRI)

I³ IT staff is well-versed in CCRI review criteria, derived from the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) directives 6211.02D and 6510.01F, as well as the Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGs).

CROSS-DOMAIN SOLUTIONS (CDS)

I³'s expertise encompasses both unclassified and classified networks, and we have worked in environments where both are required modes of operation. Consequently, out IT staff includes experts on CDS, or the means for transmitting information across disparate security regimes.

CONTINUITY OF OPERATIONS PLANNING (COOP)

I³ has extensive experience developing and implementing COOP, or the capability to continue mission-critical functions without interruption, in accordance with DoD Directive 3020.26 DoD Continuity Policy. In addition to the initial development and conception, we administer and manage COOP sites. We hold the distinction of being the first company to set up a MAC II-level COOP for a DoD Biometrics program.

OTHER IT SERVICES

I³ also maintains expertise in a variety of other IT disciplines, including IA and cybersecurity solutions for large data stores, system and network administration, software engineering, and IT service desk support.

CONTRACTS AND CLIENTS

PRIME CONTRACT VEHICLES
- GSA Multiple Award Schedule (MAS)
- SeaPort Next Generation (SeaPort-NxG)
- Responsive Strategic Sourcing for Services (RS3)
- Advanced Expeditionary Warfare Development (AEWD)

SMALL BUSINESS NAICS CODES
- 511210: Software Publishers
- 511930: Internet Publishing and Broadcasting and Web Search Portals
- 518210: Data Processing, Hosting and Related Services
- 541330: Military and Aerospace Equipment and Military Weapons [Exception 2]
- 541519: Information Technology Value Added Resellers [Exception 2]
- 541714: Research and Development in Biotechnology (except Nanobiotechnology)
- 541715: Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) [Exception 1]
- 561210: Facilities Support Services

CLIENTS
- Army Research Laboratory (ARL)
- Combat Capabilities Development Command-Armaments Center (CCDC-AC)
- Communications and Electronics Command (CECOM)
- Defense Forensic Science Center (DFSC) Biometrics Operations Directorate (BOD)
- Defense Intelligence Agency (DIA)
- Defense Manpower Data Center (DMDC)
- Defense Security Cooperation Management Office- Afghanistan (DSCMO-A)
- Defense Threat Reduction Agency (DTRA)
- Department of Homeland Security (DHS)
- Federal Bureau of Investigation (FBI) Laboratory
- Irregular Warfare Technical Support Directorate (IWTSD)
- National Media Exploitation Center (NMEC)
- Naval Information Warfare Center (NIWC)
- Naval Information Warfare Systems Command (NAVWAR)
- Night Vision and Electronic Sensors Directorate (NVESD)
- Office of Biometric Identity Management (OBIM)
- Office of the Secretary of Defense (OSD)
- Project Manager (PM) DoD Biometrics
- Terrorist Explosive Device Analytical Center (TEDAC)
- U.S. Postal Inspection Service (USPIS) Forensic Laboratory
- U.S. Special Operations Command (USSOCOM)

MORE ABOUT I^3

- **I^3**, established in 1998, is a Service-Disabled, Veteran-Owned company specializing in innovative solutions to our client's most difficult challenges utilizing biometrics, forensics, scientific and IT SMEs.
- Our company values innovative and intuitive people who want to help identify and develop creative, unconventional solutions for our clients.
- 95% of employees hold a security clearance.
- 20% of the team has been with **I^3** for over a decade.
- **I^3** is ISO 9001:2015 and ISO 27000:2013 certified.
- For more information, please email us at **info@idealinnovations.com**.