FROM RESEARCH TO INDUSTRY

cea tech

CEA TECH SERVICES FOR SECURITY

Technology for security challenges:

CHALLENGES FOR SECURITY

Protection of people and property
Behavior and situation analyses; crowd surveillance; violation detection; anti-theft and anti-intrusion systems

Protection of critical infrastructure
Intrusion detection; network, infrastructure, and manufacturing plant protection systems; surveillance drones; system-level resilience

Detection and surveillance
Video surveillance; Big Data processing (collection, automated analysis, etc.); civil drones

CBRNe
Identifying prohibited substances; detecting pathogens; tracking the transportation and storage of sensitive equipment; intervention support

Cybersecurity
Certification; cryptography; information security; personal data protection; SCADA (supervisory control and data acquisition)

CEA Tech technology

- Vision systems
- Secure software
- The Internet of Things
- Communication and protocols
- Signal, image, and mass data processing
- Sensor systems and integration
- Energy for mobile systems
- Robotics and cobotics
- Traceability

CEA Tech can help the following businesses:

- Surveillance system manufacturers
- Software developers and security service providers
- Critical infrastructure manufacturers and operators
- Manufacturers in the transportation and aerospace industries
- Government agencies

Here are some of the ways CEA Tech can support your development:

Sensors for imaging (IR, THz, X-ray) and the associated electronics	High-resolution, low-cost imaging for consumer applications; new capabilities (identification, decision-making protocols, etc.); low-energy-consumption; small form factor
Imaging systems	Baggage scanning; detection of prohibited substances and radioactive materials; leak detection; pathogen detection and identification systems (portable, fast, etc.)
Image processing and analysis	Crowd surveillance; video protection; behavior analysis; personal search, identification, and detection technologies; perimeter protection; event detection
Robotics and cobotics	Civil drones; handling of hazardous material; cobots for intervention support
Antennas, communication, and protocols	Reliability of communication in constrained environments (for firefighters, law enforcement, and critical infrastructures); secure protocols for sensor networks; traceability
Energy solutions (fuel cells, batteries)	Energy supply for off-grid sites; onboard energy systems for drones; energy harvesting for isolated sensors; wearable personal power sources
Sensor systems and integration	Monitoring for security interventions; geolocation; security gates; environmental monitoring of infrastructure (e.g. leak detection); labs-on-chip
Data mining and analysis	Epidemic and pandemic detection using semantic analysis; content search; decision-support software
Virtual and augmented reality	Driver assistance; read systems for customs checks; pilot assistance systems for drones
Hardened electronics	Reliability of infrastructure (oil & gas, nuclear, etc.) surveillance systems in hostile environments

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