

Enterprise Intelligent Security & Surveillance Platform

A modern security control room showing multiple screens with AI bounding boxes overlaying video feeds, or a sleek abstract visualization of facial recognition technology.





Executive Summary

- Al Security Monitor is a state-of-the-art enterprise security platform that bridges the gap between traditional video surveillance and advanced artificial intelligence.
- Designed for government agencies, corporate enterprises, and high-security facilities, our solution integrates real-time video monitoring with high-performance facial recognition, document verification (OCR), and license plate detection (LPR). We empower organizations to automate access control, enhance situational awareness, and manage identity data with unprecedented accuracy.

KEY FEATURES - SURVEILLANCE & RECOGNITION Live Monitor Real-time monitoring from 4 cameras

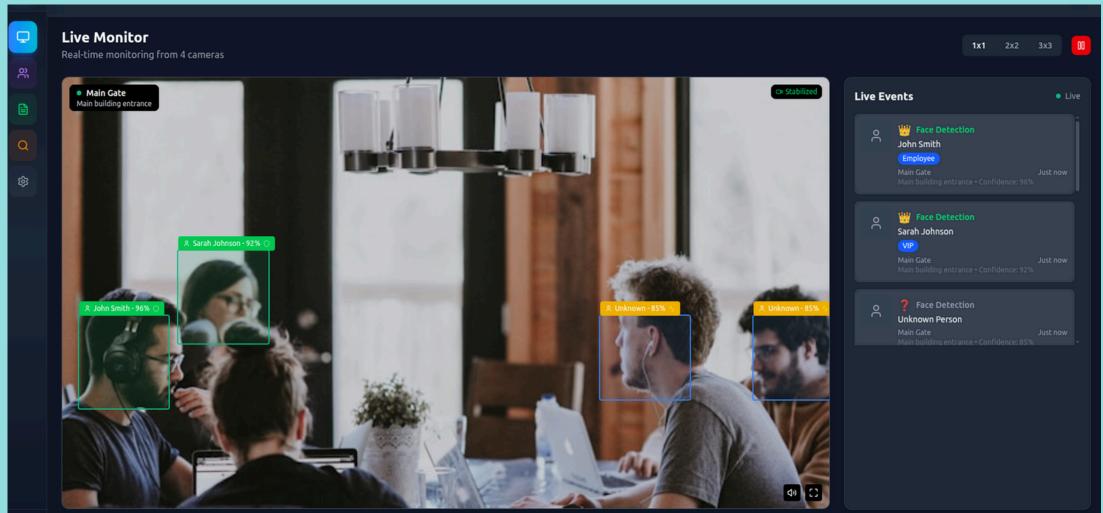
1. Real-Time Video Surveillance

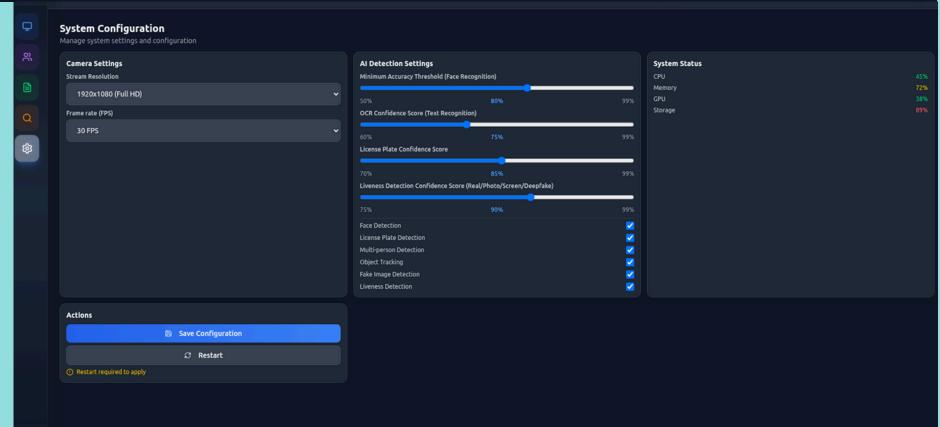
Gain total visibility over your premises with our low-latency streaming engine.

- Multi-Camera Grid: Monitor multiple IP cameras simultaneously with flexible 2x2 or 3x3 layouts.
- Live Al Overlay: Visualize Al in action with automatic bounding boxes around detected faces and vehicles in real-time.
- Universal Compatibility: High-quality streaming via RTSP and WebRTC protocols.
- Health Monitoring: Instant status tracking (Online/Offline) for all connected devices.

2. Advanced Facial Recognition Industry-leading accuracy for identity management and access control.

- High-Fidelity Matching: Instant identification against your registered database with visible confidence scores.
- Smart Profiles: Manage distinct groups including Employees, VIPs, Visitors, and Blacklisted individuals.
- Multi-Face Enrollment: Enrol multiple reference photos per person to ensure high accuracy across different angles and lighting.
- Intruder Detection: Automatically flag and alert on "Unknown" individuals not found in the database.





KEY FEATURES - OCR & LPR

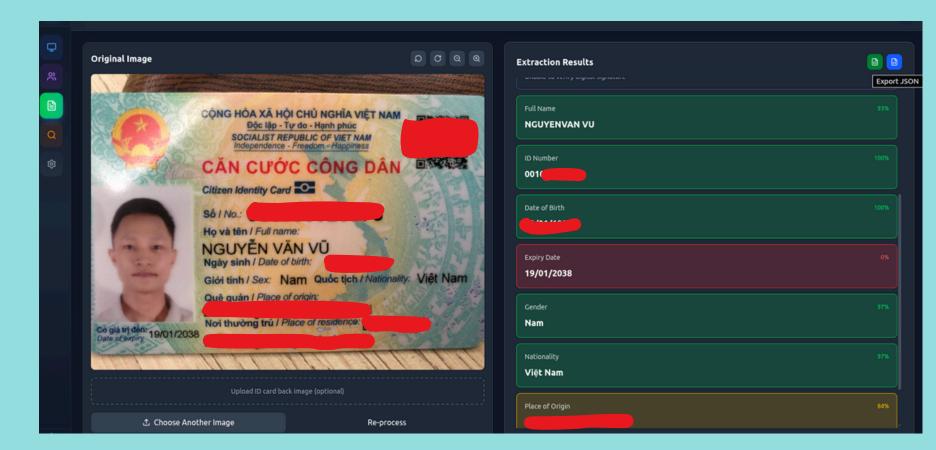
3. Intelligent Document Processing (OCR)

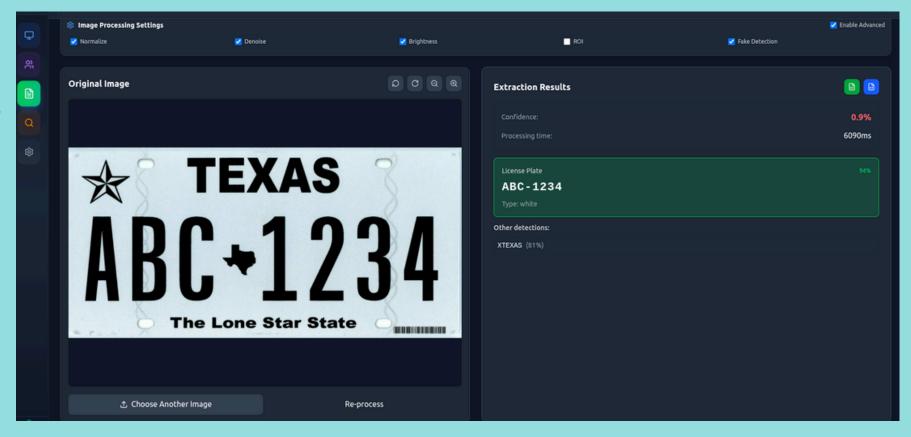
- Automate data entry and verification with deep-learning-based Optical Character Recognition.
- ID & Passport Parsing: Automatically extract full name, DOB, ID number, issue dates, and address from National ID cards and Passports (MRZ).
- Vietnam Specific Support: Optimized for Vietnamese language characters and document formats.
- Face Matching Fraud Detection: Automatically crop the portrait from the ID document and compare it with the live camera feed to prevent identity fraud.
- Data Export: Seamless export to JSON/XML for integration with 3rd party systems.

4. License Plate Recognition (LPR/ANPR)

Streamline vehicle access and parking management.

- Automated Entry: Real-time reading of license plates from video feeds to trigger barriers or gates.
- Multi-Format Support: Accurately recognizes various plate designs and dimensions.
- Confidence Scoring: Each detection includes an accuracy metric to ensure reliability.

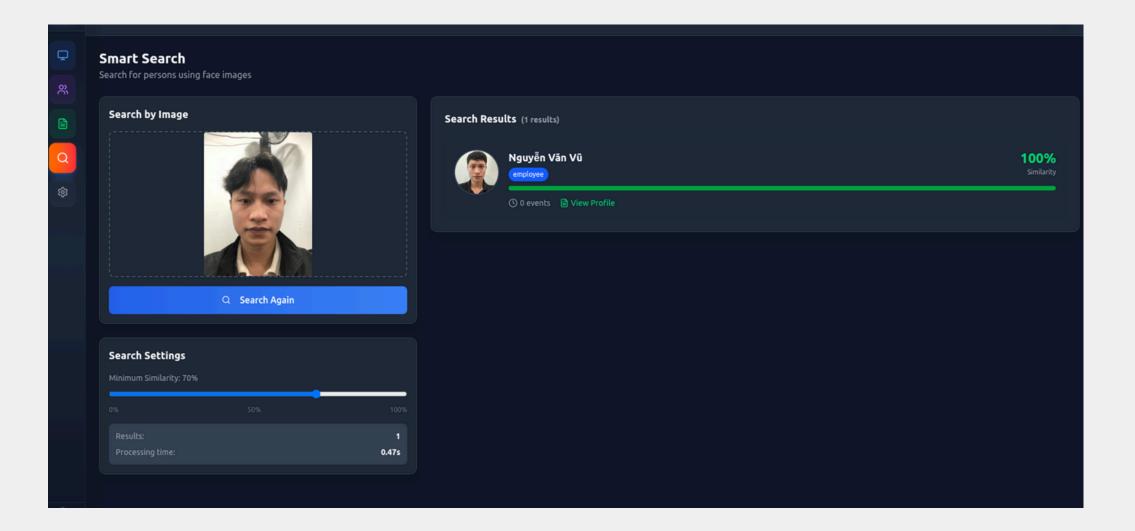




5. Smart Search & Analytics

Turn raw video data into actionable business insights.

- Face-Based Search: Upload a photo to instantly find every time that person appeared across all cameras.
- Timeline Tracking: View a chronological history of a person's movements within the facility.
- Heatmaps: Visualize high-traffic areas and detection density.
- Visitor Statistics: Dashboard views for total events, daily summaries, and unique visitor counts.

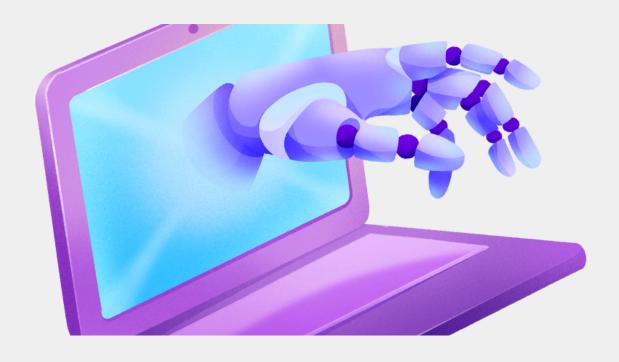




6. Event & Alert Management

Proactive security through real-time responsiveness.

- Instant Notifications: WebSocket integration delivers push alerts the moment an event occurs.
- Blacklist Alerts: Immediate warnings when security threats or banned individuals are detected.
- Rich Event Logging: Every event is stored with timestamps, confidence scores, snapshot images, and short video clips.





Technical Specifications

System Architecture

- Backend: Robust RESTful API (Golang/Python)
- Frontend: Modern, responsive Web Interface (React/Vue)
- Database: PostgreSQL for data integrity; Redis for high-speed caching
- Storage: Scalable Object Storage for images and video evidence

Al & Security

- Face Engine: Deep learning neural networks for feature extraction.
- Security: JWT-based authentication, Role-Based Access Control (RBAC), and HTTPS/TLS encryption.
- Integration: Full OpenAPI/Swagger documentation, WebSockets, RTSP/ONVIF support.

Hardware Requirements (On-Premise)

- Component
- Minimum Config
- Recommended (Production)

• CPU 8 Cores 16+ Cores • RAM 16 GB 32+ GB

• Storage 500 GB SSD 2 TB+ NVMe

• GPU N/A NVIDIA GPU (Required for high-load AI)

USE CASES & CONTACT

Industry Applications

- m Corporate Offices: Employee timekeeping and unauthorized access prevention.
- $\hat{\mathbf{m}}$ Government: Checkpoint verification and person-of-interest tracking.
- 🗮 Retail: VIP customer recognition and loss prevention.
- Transport & Logistics: Automated parking and driver verification.
- 📋 Healthcare: Patient tracking and restricted area control.

Support & Maintenance

We ensure your system runs at peak performance.

- Included: System installation, user training, standard business-hour support, and security patches.
- Optional: 24/7 dedicated support, custom API integration, and hardware procurement.