

The Intelligent Annotation Engine

Enabling Smarter AI For The Travel Industry With Image and Video Annotation

Modern aviation operations generate enormous volumes of image and video data, from flight decks and terminals to hangars and supply zones. Yet most of this data goes unused by AI systems due to a lack of structured annotation. Visual data remains a missed opportunity for automation, safety, and operational intelligence without accurately labeling actions, objects, and sequences. iTag.AI, IGTx's AI-powered annotation platform, is purpose-built to unlock this value.

By enabling scalable, accurate annotation of complex visual content, iTag.Al transforms raw video and imagery into usable training data for advanced Al models. The result: smarter, context-aware systems that improve decision-making, compliance, and efficiency in aviation and travel operations.

Key Use Cases

Security Behavior Detection from Surveillance

Challenge: Unmonitored or under-analyzed security footage fails to surface behavioral risks.

Solution with iTag.AI: Annotate surveillance video to train AI models that detect unauthorized access, tailgating, or prolonged presence in secure areas by learning from real-world activity patterns—not just static images.

Airside Operational Sequence Monitoring

Challenge: Ground operations involve multiple critical steps and are prone to delays or human error.

Solution with iTag.Al: Label sequences of airside tasks, refueling, baggage handling, pushback to enable Al systems to verify step completion, detect errors, or alert for out-of-sequence operations.

Maintenance, Repair, and Overhaul (MRO) Workflow Visibility from Hangar Video

Challenge: Maintenance activities are hard to track without manual logging or digital twins.

Solution with iTag.AI: Use annotated video to model component removal, inspection, and reinstallation workflows supporting digital audits, productivity analysis, and compliance validation.

Passenger Flow & Queue Activity Tracking

Challenge: Terminal congestion and inefficiencies are hard to diagnose without behavioral insights.

Solution with iTag.Al: Annotate behaviors like waiting, dispersing, and kiosk interaction to train Al that optimizes terminal design, reduces bottlenecks, and supports real-time staff allocation.

Parts Movement and Inventory Event Detection

Challenge: Untracked part movements can lead to inventory discrepancies and losses.

Solution with iTag.Al: Annotate storage area footage to train Al that detects when parts are picked, returned, or misplaced—improving availability tracking and preventing unauthorized handling.

Component Condition and Visual Inspection Training

Challenge: Manual inspections are time-consuming and prone to inconsistency.

Solution with iTag.AI: Label images and video of components pre- and post-maintenance to train AI for visual damage detection, historical comparison, and preventive maintenance alerting.

Impact

By turning raw visual content into structured datasets, iTag.AI enables aviation stakeholders to:



Automate complex operational checks



Enhance safety and compliance through behavioral Al



Optimize workforce and passenger flow with real movement data



Reduce downtime and manual logging in maintenance



Secure inventory through smarter



they're real, practical applications achievable today with the right annotation infrastructure.



Why iTag.Al

- Purpose-built for aviation and travel environments
- Supports temporal, behavioral, and spatial annotation
- Scalable across thousands of video hours and images
- **Accelerates AI deployment timelines** by simplifying data prep
- Secure, compliant, and enterprise-ready