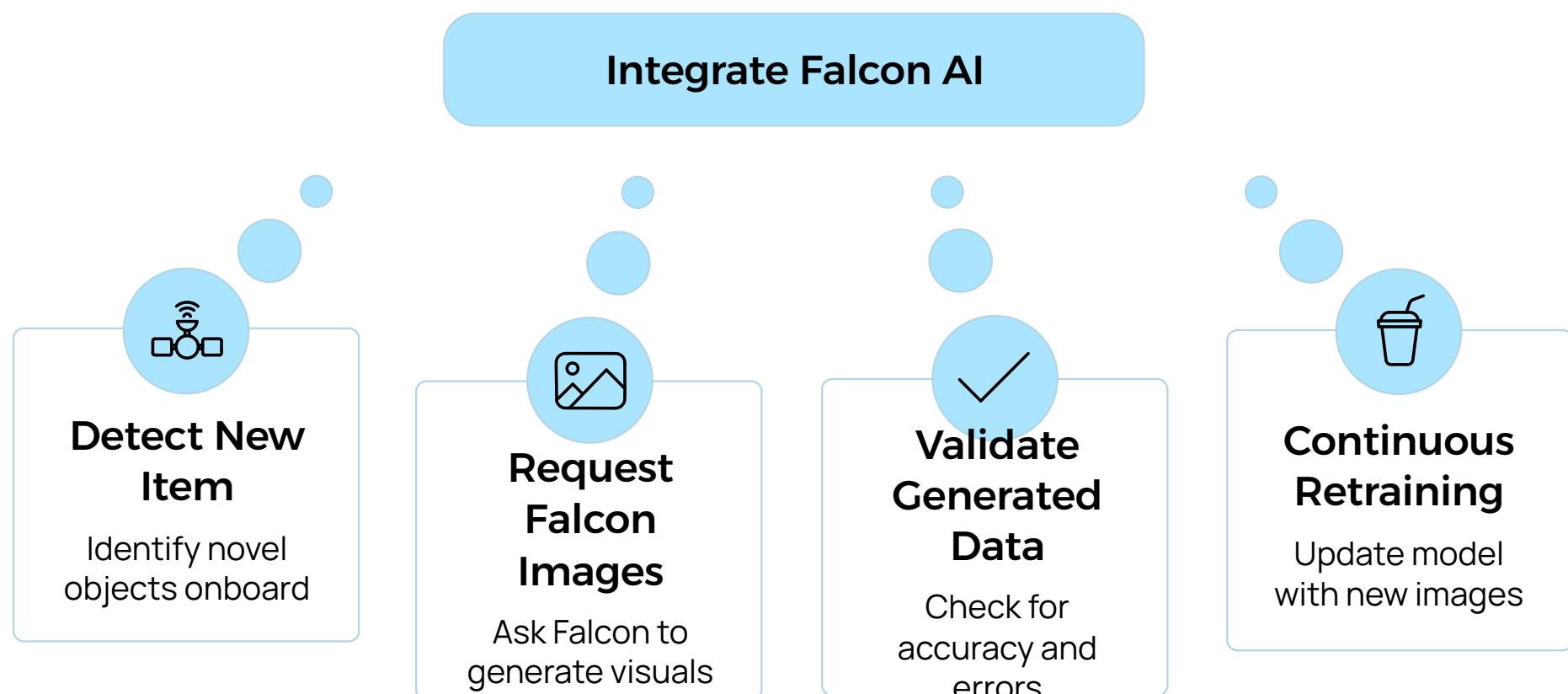




Orbital Watch: The Future of Industrial Safety

A Multimodal AI Auditor engineered for the modern industrial landscape. Trained on Intel i5 architecture and powered by Falcon AI for uncompromising reliability.

MY IDEA IS TO INTEGRATING FALCON AI WITH OUR AI MODEL SO IF THERE IS NEW ITEM IN SPACE STATION IT WILL TELL TO FALCON AI TO GENERATE IMAGES AND TRAIN THAT WE CAN UPDATE OUR MODEL AND TRAIN OUR MODEL CONTINUESLY WIHOUT ERRORS AND



The Silent Crisis in Industrial Environments

Despite advancements in manufacturing, manual safety inspections remain a critical vulnerability. Human error and fatigue lead to "invisible" hazards that jeopardize lives and assets.

- Subjective manual reporting
- High costs of regulatory non-compliance
- Delayed response to missing safety equipment



90%

Preventable Incidents

Of industrial safety accidents are avoidable through real-time, persistent monitoring.

The Orbital Solution: 7-Class Precision

Our system maintains a persistent watch over critical life-saving assets using advanced visual recognition.



Oxygen & Nitrogen



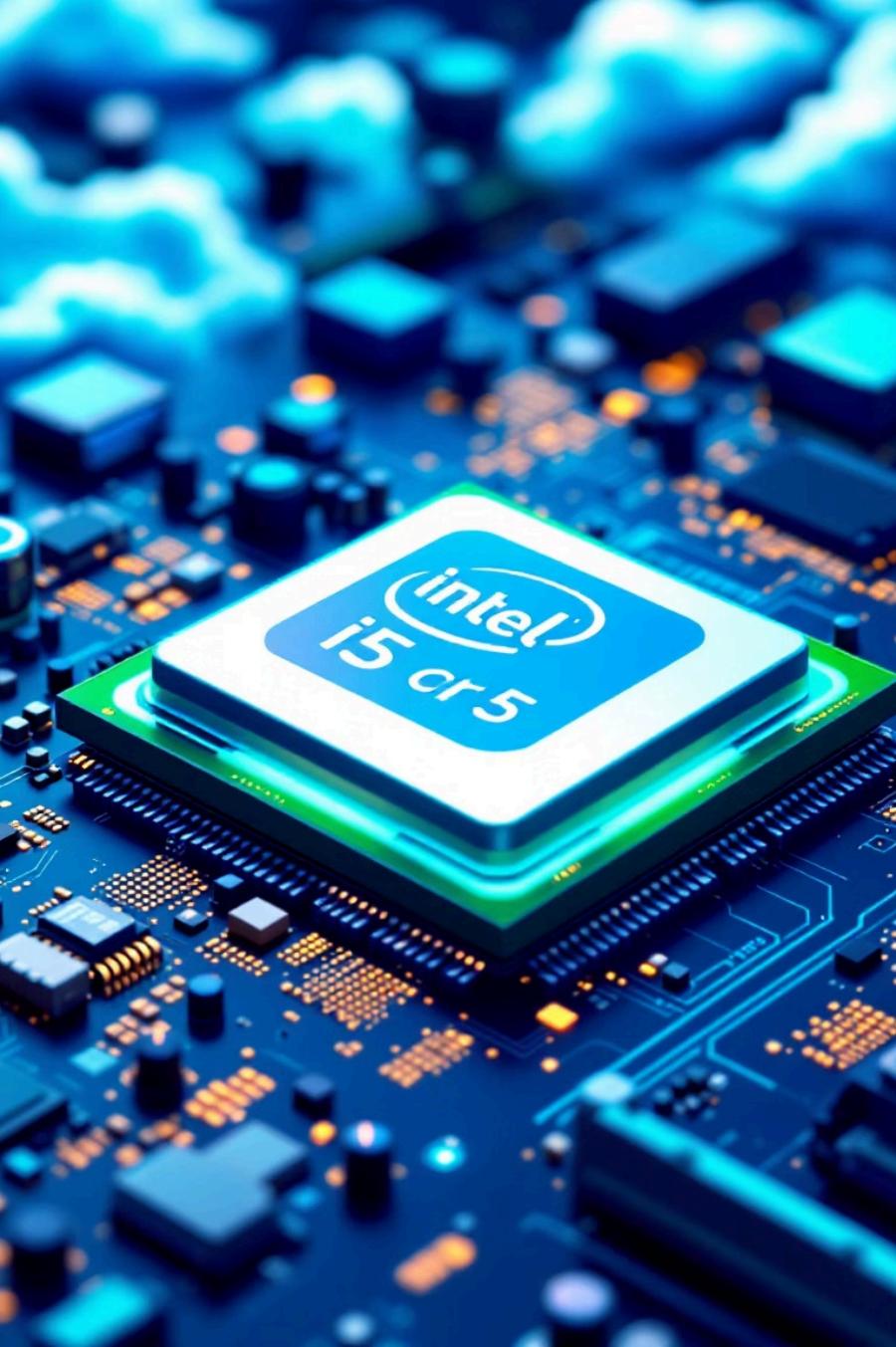
First Aid & AED



Alarms & Extinguishers



Safety Switches



we used cpu i5 8gen to
train this model with only
320p to simulate real
problems

Zero-Human Data Loop

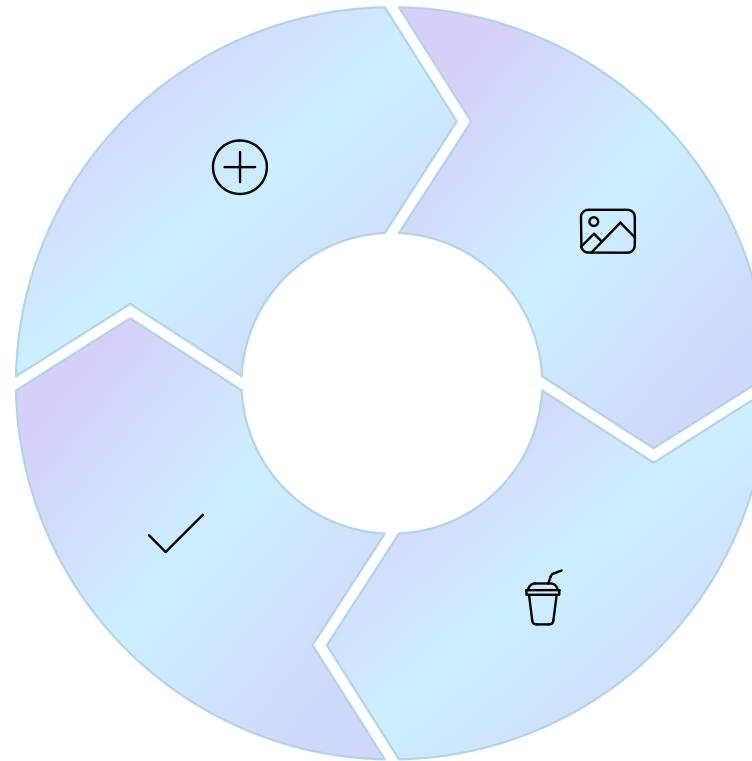
Our automated retraining pipeline ensures the system evolves with your facility in minutes, not months.

New Asset

Define a new safety item's Digital Twin.

Deploy

Dashboard updates with live monitoring.



Synthesis

Falcon generates 1,000+ training images.

Retrain

Automated model fine-tuning at the edge.

Engineering Through Constraints

True innovation occurs when resources are limited. We proved that high-end safety AI doesn't require high-end hardware.



Challenge

No high-end GPUs available for deployment on remote factory floors.

Solution

Optimized YOLOv8n using OpenVINO and hardware-specific quantization for Intel i5.

Outcome

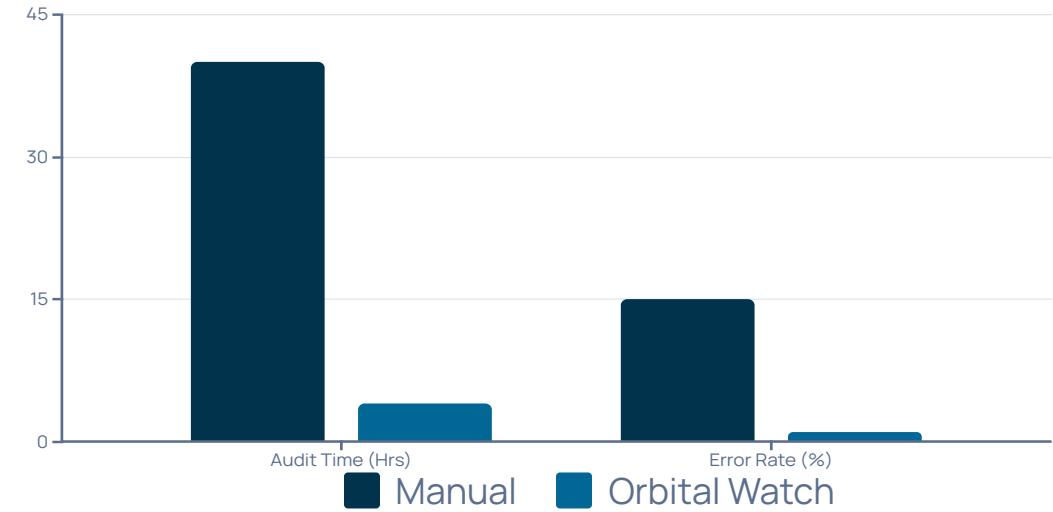
Seamless deployment on existing, low-cost facility workstations with high FPS.

Impact & Global Scalability

The Industrial Network

Orbital Watch scales from a single workcell to a global network of interconnected factories.

- Standardized safety audits across regions
- Predictive maintenance of safety gear
- Centralized compliance dashboard



Join the Future of Autonomous Safety

- ☐ **Final Summary:** Orbital Watch provides a low-cost, high-impact solution to industrial negligence, ensuring that every life-saving device is exactly where it needs to be, 24/7.

Explore the source code and contribute to safer workplaces.

[GitHub Repository](#)

Special Thanks to **Duality AI** for empowering our synthetic data pipeline.