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lexdata

STATUS: ACTIVE DEPLOYMENT

INDUSTRY USE CASE

DATA INTELLIGENCE IN RETAIL ENVIRONMENTS

[4M+ RETAIL ANNOTATIONS & VALIDATIONS]

// THE CHALLENGES

[01] In-store computer vision models suffered severe accuracy degradation due to rapidly shifting floor plans, dynamic lighting, and unpredictable consumer behavior.

[02] High volumes of false positives and missed detections crippled automated alert systems, generating massive operational bottlenecks.

[03] Heavy reliance on manual video review for foot traffic analysis, point-of-sale monitoring, and loss prevention eroded margins.

[04] Enterprise-wide rollout to new retail footprints was severely bottlenecked by brittle data foundations and expensive localized retraining.

// OUR SOLUTIONS

[01] Engineered and validated massive-scale visual datasets, systematically structuring pixel data to aggressively tune edge-deployed detection models.

[02] Architected highly efficient human-in-the-loop (HITL) pipelines to triage real-time alerts and instantly resolve complex visual edge cases.

[03] Seamlessly integrated structured data feeds directly into live operational dashboards and automated in-store response triggers.

[04] Deployed active data operations to establish continuous learning loops, ensuring algorithms adapt instantly as store environments evolve.

// THE RESULTS

> Achieved uncompromising reliability in the real-time spatial tracking of customers, staff, and physical assets across hundreds of locations.

> Drastically reduced false alert fatigue, allowing loss prevention and floor managers to execute faster, data-backed operational decisions.

> Accelerated the go-live timeline for smart-store automation systems, including frictionless checkout and automated traffic counting.

> Unlocked frictionless scalability, enabling global retailers to deploy computer vision architectures rapidly without sacrificing precision.

OPERATIONALIZE YOUR VISUAL DATA.

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