

COMPUTER VISION & AI

AI-Powered Vehicle & Component Inspection

• PROPOSED CAPABILITY — APPLICATION OF OUR AI/ML DELIVERY EXPERIENCE TO AUTOMOTIVE

Manual visual inspection is slow, inconsistent, and hard to scale — two inspectors rarely agree on where "minor wear" becomes something that affects value, warranty, or safety. We design AI systems that bring consistency and auditability to judgement-heavy processes like this, drawing on our track record delivering production AI/ML systems for asset-heavy, inspection- and maintenance-driven businesses.

The Problem We'd Be Solving

Two inspectors looking at the same vehicle produce different assessments often enough that it becomes a business problem — disputed trade-in valuations, contested lease-return charges, challenged insurance estimates. It also doesn't scale: a volume spike is a staffing problem, not just a longer queue, when every inspection needs a trained person physically present.

Where It Would Apply

- **Automotive retail:** trade-in valuation, lease-return condition reports
- **Insurance & bodyshop:** first-notice-of-loss damage estimating
- **Fleet & rental:** pre/post-hire condition checks
- **Manufacturing QA:** component/surface defect detection on a line or at goods-in

Our Proposed Technical Approach

- 1 Guided photo capture**
Smartphone flow or fixed capture station — designed to work with real-world photo quality, not just controlled conditions
- 2 Computer vision detection**
A model trained to identify type, location, and severity per item photographed
- 3 Confidence-based routing**
High-confidence cases auto-approve; ambiguous cases route to a human reviewer — never a black-box-only decision
- 4 Structured output**
Designed to integrate directly with the existing DMS, CRM, or valuation system, not sit as a standalone report

RELEVANT AI/ML DELIVERY EXPERIENCE

British Engineering Services — AI-Powered Predictive Maintenance

A different problem (predictive failure modelling, not image-based inspection) but the same underlying discipline: taking a judgement-heavy, reactive process and making it consistent, data-driven, and auditable. We modernised BES's legacy platform and built the AI/ML layer — predictive models, cognitive monitoring, and an AI-enhanced dashboard on Azure Machine Learning and Azure Cognitive Services.

92%

Failure prediction accuracy, 30 days ahead

65%

Reduction in unplanned downtime

70%

Reduction in manual work via automation

Full case study: 200oksolutions.com/insights/case-study-details/british-engineering-service

SECTORS SERVED

Automotive Retail

Fleet & Leasing

Insurance & Bodyshop

Manufacturing QA

How We'd Approach a First Engagement

We'd start narrow — one workflow, one site — rather than a full rollout, so accuracy and integration can be validated on a defined slice of volume before scaling. The exact scope and timeline depend on the data available (historical inspection photos and outcomes) and the target system's integration options, which we'd assess together in an initial technical discovery conversation rather than quoting a fixed timeline upfront.

This brief describes a capability we're positioned to deliver, based on directly relevant AI/ML delivery experience — not an already-built vehicle inspection product. The figures shown are from a separate, named engagement (British Engineering Services), cited to show AI/ML delivery track record, not vehicle inspection accuracy specifically.