

TRANSFORMING INDUSTRIAL AUTOMATION THROUGH DATA INTELLIGENCE

The Challenges

- Models performed well in pilots but lost accuracy as environment changed
- False defects and missed issues created rework, downtime and manual overrides
- Disconnected machines and sensors prevented real-time AI feedback
- Adding new automation required expensive retraining and complex system integration

Our Solutions

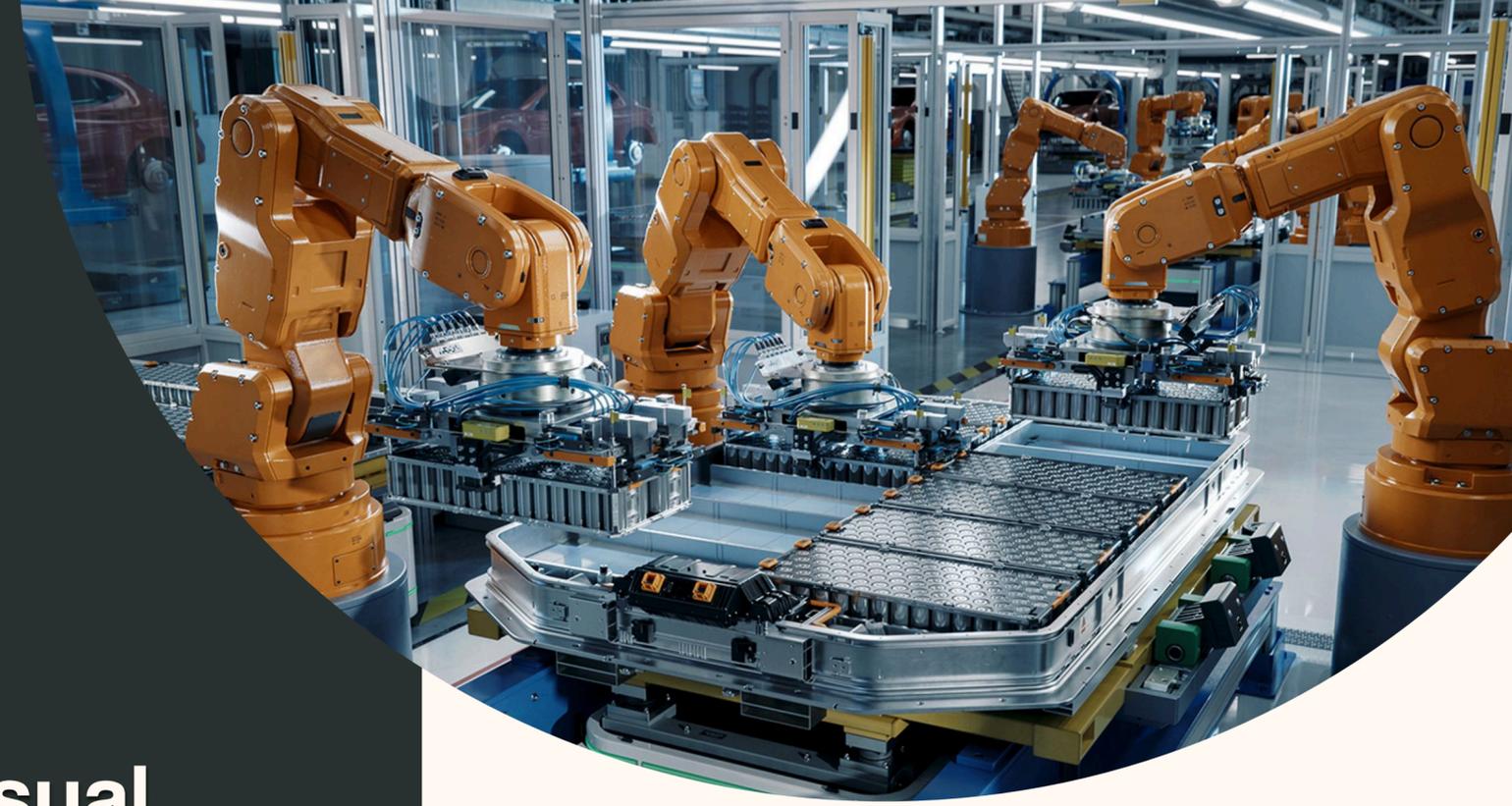
- Built pixel-level annotated datasets and multi-sensor alignment for reliable defect detection
- Created a real-time data layer connecting machines, cameras and AI models
- Deployed live monitoring dashboards and automated maintenance alerts
- Enabled continuous visual QA and retraining as production conditions evolved



High-volume visual inspection & defect detection

Operational impact

- Maintained 99%+ defect detection accuracy across changing production environments
- Reduced unplanned downtime through earlier issue detection and predictive maintenance
- Enabled scalable automation as new machines and sensors were added
- Lowered energy waste and overall operating costs



How Lexdata Supports Continuous Automation Intelligence

- Keeps production AI reliable as factory conditions, equipment and workflows change
- Enables rapid model updates and retraining from real-world production feedback
- Helps manufacturers scale automation across new lines and facilities without rebuilding systems

Contact us: reach@lexdatalabs.com