



QUARKEON LABS

Applied AI. Evidence you can inspect.

Documents, knowledge, vision and speech — connected to practical workflows by three AI engineers.



INDEPENDENT PORTFOLIO

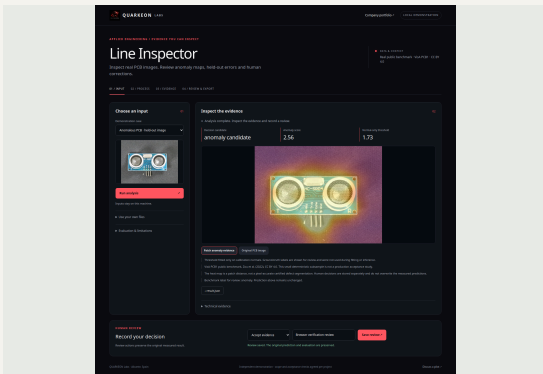
11 demonstrations with English walkthroughs and recorded evaluations.

BASED IN ALICANTE, SPAIN

Working in English and Spanish. Local inference and reviewable outputs.

From an operational problem to a reviewable result.

Three examples of how we connect model output with evidence, correction and a useful next step.



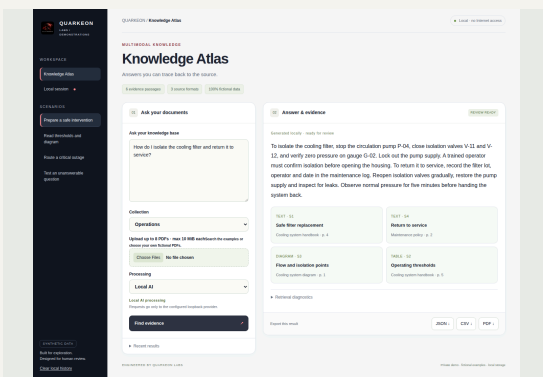
QUALITY AND COMPUTER VISION

Line Inspector

Inspect real PCB images against normal references. Review anomaly maps and measured false positives before saving a human decision.

VisA PCB1 public subset, CC BY 4.0: 76/80 correctly classified; 4 false positives. Not a factory acceptance study.

[Watch the walkthrough →](#)



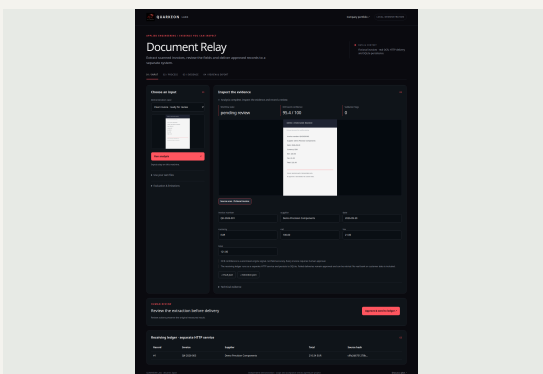
INTERNAL KNOWLEDGE

Knowledge Atlas

Ask questions across documents and inspect page references. Review evidence and explicit abstention when the corpus cannot support an answer.

Recorded synthetic cases; valid citation IDs alone do not establish semantic correctness.

[Watch the walkthrough →](#)



DOCUMENTS AND INTEGRATION

Document Relay

Review scanned invoice fields and deliver approved data to a separate persistent ledger, with idempotency and recoverable retries.

Fictional invoices: 81/84 fields before review; eight real HTTP workflow checks.

[Watch the walkthrough →](#)

These are independent Quarkeon demonstrations with public or fictional inputs identified per case, not client success stories. Each public case provides a video, a case-study PDF, measured evidence and its limitations.

A clear first step. An agreed path to delivery.

01 Validate a use case

Review representative permitted inputs, the desired outcome and constraints. Deliver an evidence-based feasibility assessment and a defined pilot scope.

02 Build an evaluated pilot

Connect input, model processing, validation, human review and an agreed output. Deliver a bounded application or API, acceptance evidence and documentation.

03 Integrate into your workflow

Connect the accepted pilot to agreed systems and an operating environment. Document access, failure handling, deployment and handover. Maintenance is scoped separately.

Current models, measured improvements

We follow relevant language, vision, audio and multimodal releases. We compare quality, speed, cost and resources before incorporating a change. Adoption follows practical value and project requirements.

Define success before building

We agree on deliverables, milestones and acceptance checks. Model selection, privacy, licenses and infrastructure are reviewed for the actual use case.

Capabilities: document extraction and reconciliation · RAG and source-grounded answers · agent workflows · visual inspection, image matching and 3D geometry · transcription and synthetic speech.

Three engineers. Shared technical judgement.

Alejandro Climent Peñalver

Robotics Engineering · MSc Applied Artificial Intelligence, Universidad Carlos III de Madrid. RAG, machine learning and generative AI research published at IEEE ICRA 2026.

Ander García Hoyberg

Robotics Engineering · MSc Robotics, Graphics and Computer Vision, Universidad de Zaragoza. Computer vision, OCR and document workflows; research experience at Technical University of Munich.

Sergio García Muñoz

Robotics Engineering · MSc Artificial Intelligence, Universidad de Alicante. Audio, coordinated agent systems and local inference; two research publications, the master's Extraordinary Academic Award and ValgrAI recognition.

The team won the Spanish round of the Sopra Steria International Student Challenge 2025. Ander and Sergio also won the national Cervera 5R instance-segmentation challenge. Public profiles and sources are linked on our website.

What should your workflow do better?

Tell us what data you have, the output you need and how success should be checked. We can define a concrete first milestone.

[Contact Quarkeon Labs on Upwork →](#)

[Explore the public portfolio →](#)

No confidential sample is needed for an initial conversation. Share sensitive inputs only through a channel and processing arrangement agreed for your project.