



The world-leading platform for building medical Vision AI solutions

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BY



ENTERPRISE  
SECURITY + HIPAA

**VIDEO FILE SHARED SEPARATELY**

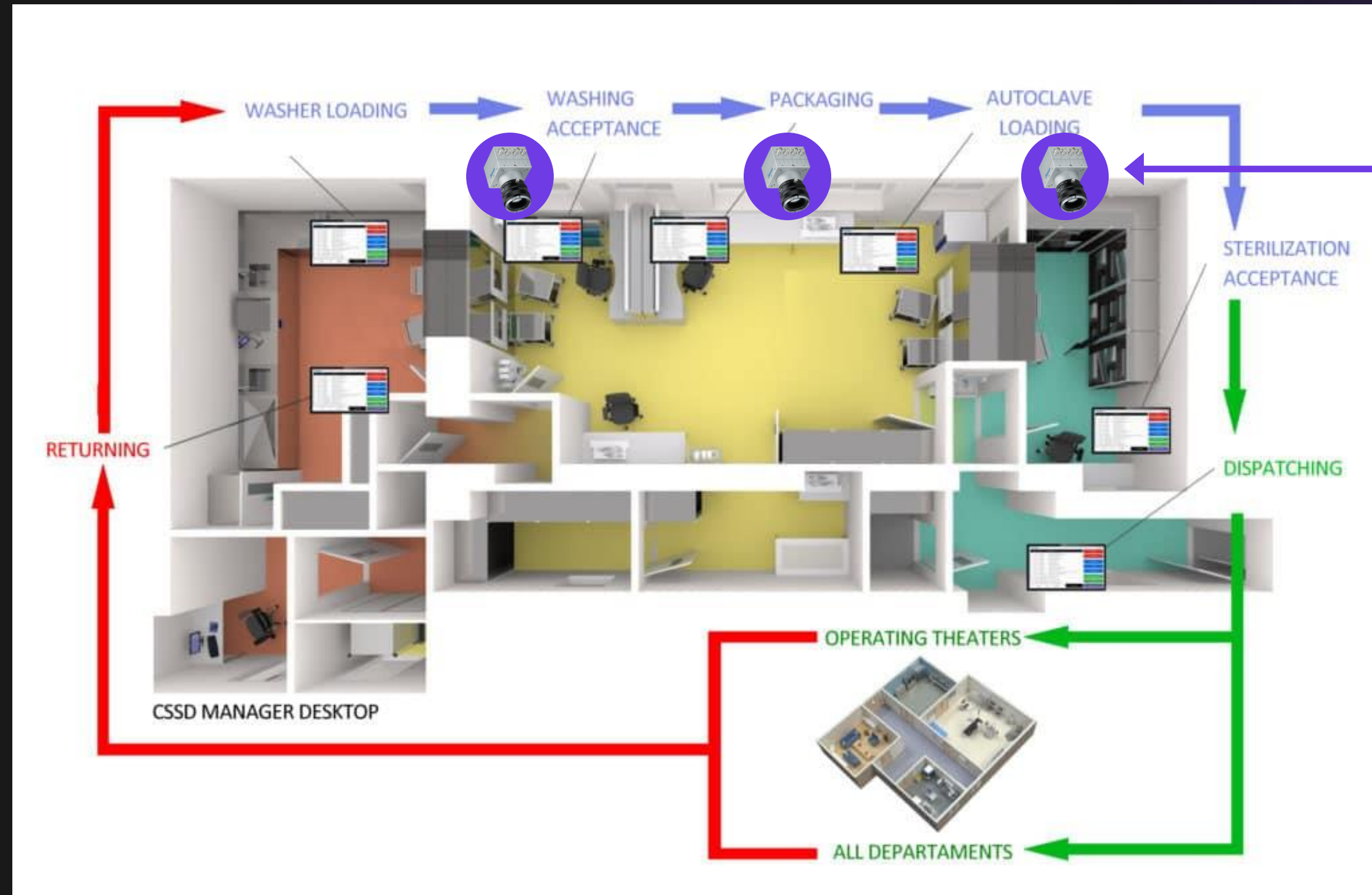


**PLEASE ADD AND MAKE FULL SCREEN**

# Optimising Surgical Instruments for Safer, More Efficient Surgeries



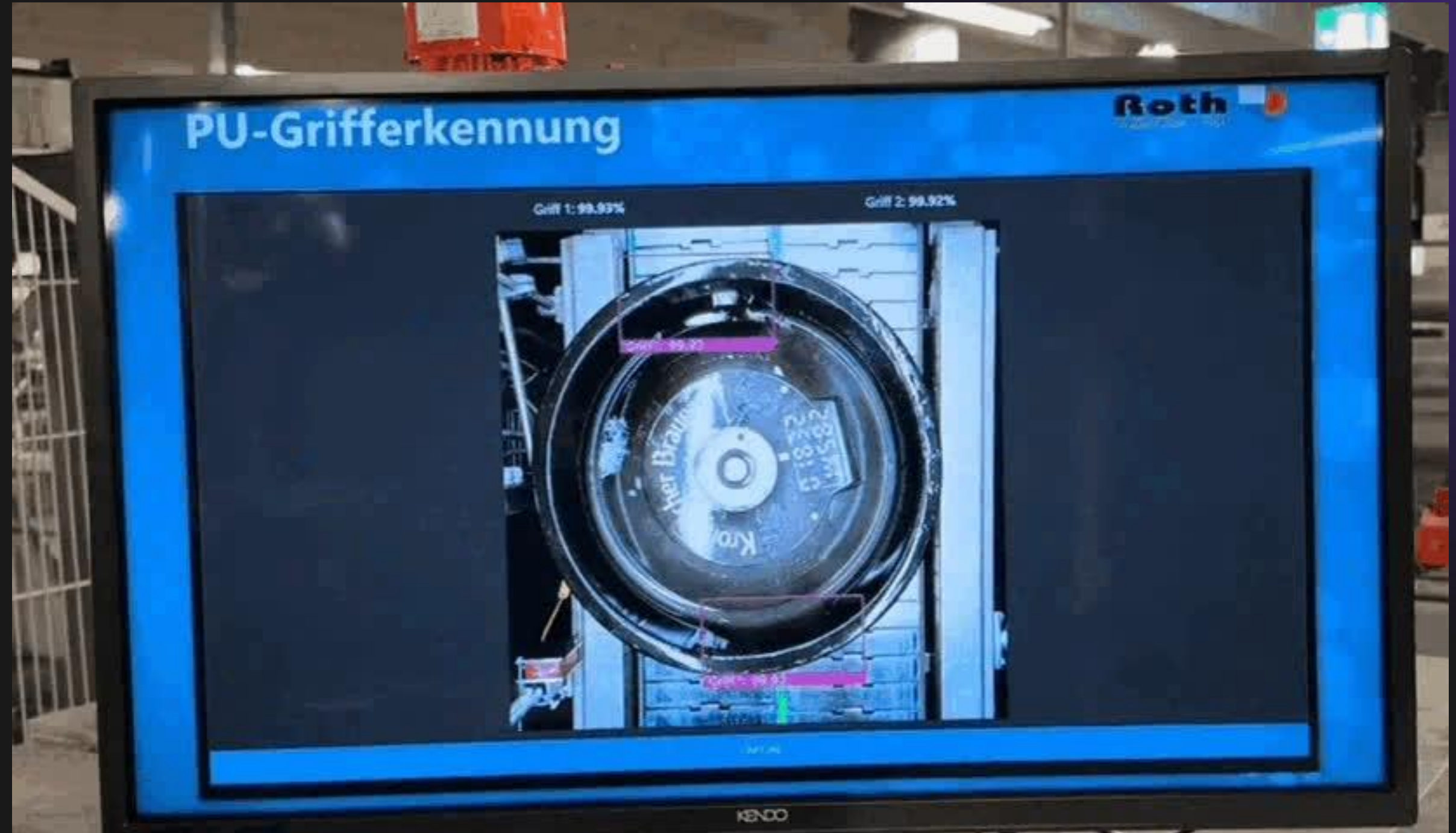
Overview of Enhanced CSSD workflow



## Datature Enhancements

Cameras installed at different checkpoints can take pictures that are processed by an AI module to automatically identify each instrument, count the number of instruments, inspect for damage to the instrument and any packaging, and input this information in the central database tracking assets.

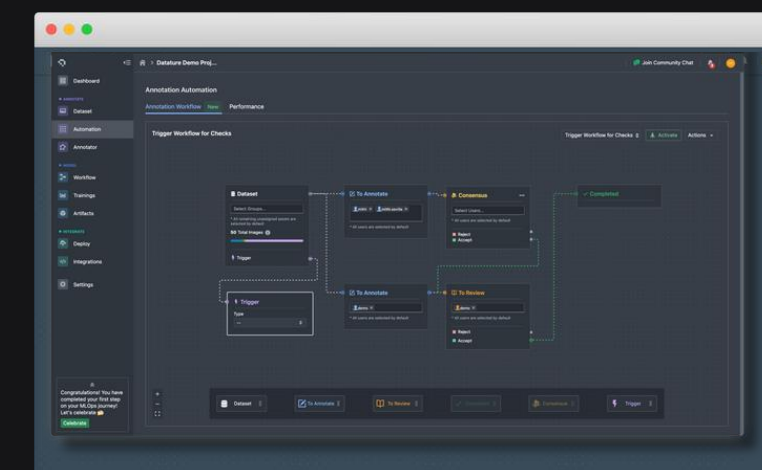
# Datature is Experienced with Integrating Quality Control Systems



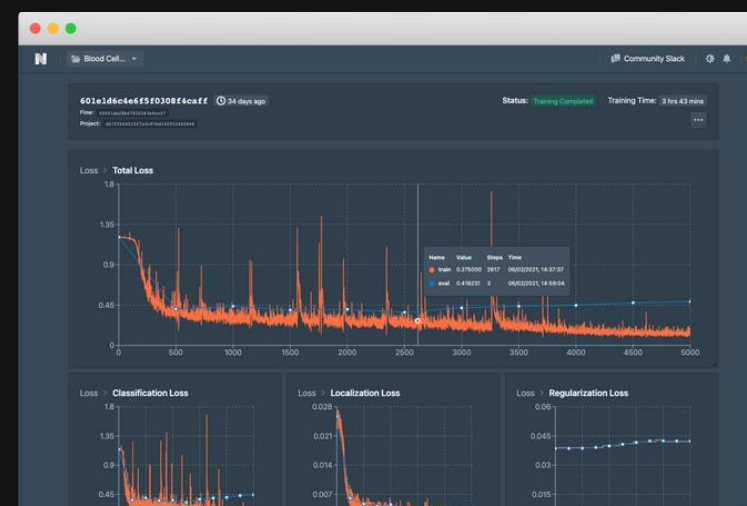
# Datature's Vision AI Platform: Easy-to-Use, Flexible, Built for Scale



AI-assisted tools that help manage, curate, and rapidly annotate data



Labeling workflow automation for teams;  
No-code set-up for rapid model training



Continuous learning pipelines that ensure long term sustainability in operations

Datature's **no-code, end-to-end** Vision AI platform makes it fast to **build, deploy, and manage** AI apps that enhance your operations

SOC II and HIPPA-compliant platform so you can run onsite with flexible scaling to cloud



# Datature's New VLMs Tools Unlock Powerful New Capabilities



The screenshot displays the Datature Asset Annotator interface for a 'Bone Fracture Report'. The interface is split into two main panels: 'Asset Annotator' on the left and 'Phrase Grounding' on the right.

**Asset Annotator:** Shows a lateral radiograph of a hand. Two rectangular regions are highlighted: a purple one at the top and a green one in the middle. A toolbar at the bottom of the image panel includes icons for zoom, pan, and other editing functions.

**Phrase Grounding:** Displays a structured text report with highlighted segments corresponding to the annotations:

- Clinical Indication:** Evaluation of finger pain and/or trauma
- Technique:** Lateral radiograph of the finger
- Findings:**
  - Phalanges:** Fracture located at the mid-shaft of the middle phalanx. The fracture demonstrates a transverse fracture line with cortical disruption. There appears to be minimal to mild displacement with slight volar angulation at the fracture site. The proximal and distal phalanges appear intact without evidence of fracture.
  - Joints:** The proximal interphalangeal (PIP) and distal interphalangeal (DIP) joints appear grossly intact with preserved joint spaces. No evidence of dislocation is noted on this lateral view.
  - Soft Tissues:** Soft tissue swelling is present adjacent to the fracture site. No radiopaque foreign bodies are identified.
  - Impression:**

Below the report, a list of annotated assets is shown, each with a thumbnail and a label 'Annotated'. The asset ID '1cf93be6-5b5f...' is highlighted in blue.

# Datature's New VLMs Tools Unlock Powerful New Capabilities



The screenshot displays the Datature interface for configuring a VLM tool. The main window shows a system prompt configuration for a model named 'QWEN2.5VL 7B'. The prompt is titled 'System Prompt' and is set to 'CUSTOM Source'. The prompt text is as follows:

```
You are a precise visual grounding assistant specialized in detecting fractures and generating spatially-aware radiology reports.

## Task Definition
Given an image, you will:
1. Generate a radiology report comprising the Clinical Indication, Radiology Technique, Findings, Impression, Conclusion.
2. Extract grounded phrases (noun phrases with visual referents) of any fractures or hardware inserts within the generated report.
3. Provide accurate bounding boxes for each grounded phrase's referent(s)

Reply every message

## Output Requirements

### Report Construction
- Generate ONE comprehensive radiology report per image
- Report Sections:
  * Clinical Indication: Why the imaging was ordered (patient's symptoms / reason for the scan).
  * Technique: How the imaging was done (type of scan, contrast used, technical details).
  * Findings: What is observed in the images (detailed observations)
  * Impression: Interpretation / summary of the most important findings.
  * Conclusion: Final summary and recommendations.
- GROUNDED PHRASES MUST ONLY EXIST IN THE FINDINGS SECTIONS
- Ensure the detections cover various regions across the entire image
- Do NOT focus on only one object or region of the image
- Use specific, grounded language (avoid simply stating that a fracture was found, instead add the location where it was found too)
- Ensure all mentioned fractures (and/or hardware inserts) are visually present in the image (do NOT hallucinate)

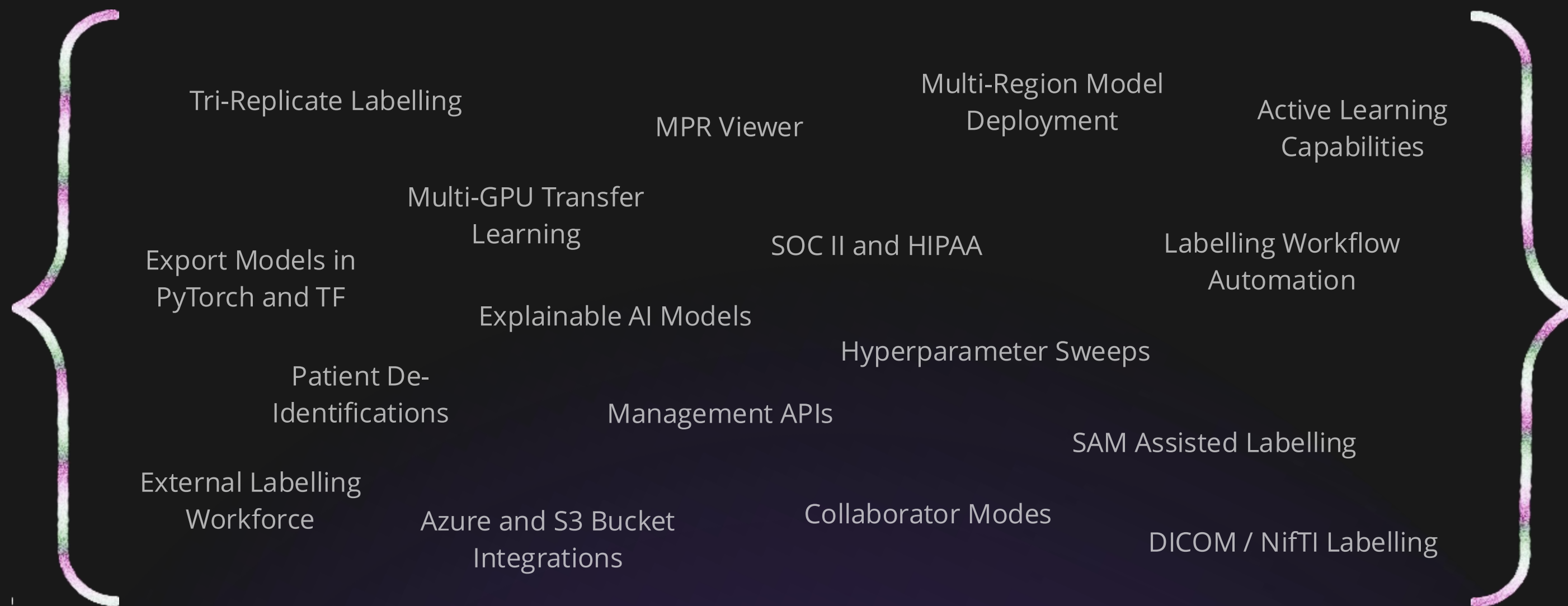
### Phrase Extraction
- **Grounded phrases**: Noun phrases that refer to visible fractures or hardware inserts in the image
  * GROUNDED PHRASES MUST ONLY EXIST IN THE FINDINGS SECTIONS
  * Must be EXACT substrings found within the report (character-for-character match)
  * Include the fracture / inserts and its location (e.g., "fracture located at the
```

The interface also shows a sidebar with various configuration options for the model, including 'Source', 'Strategy', 'Split Ratio', 'Shuffle', 'Architecture S', 'Training Mode', 'Quantization', 'Epochs', and 'Batch Size'. A 'Reset to Default' button is visible at the bottom of the system prompt configuration window.

# How You Write Prompts Matters... A Lot



# Stay Compliant and Deliver World-Class Projects with Datature



**Industry Best, Safest Practices - In One Platform.**



# Build Medical AI Solutions Today.



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