

2025



# Art Crop System

Multi-AI consensus cropping with 4-tier fallback intelligence. 2M+ images processed, 8 detail crops per artwork.

Python · OpenCV · rembg · Multi-AI Vision

2M+ Images Processed

# Manual Cropping Can't Keep Up



## 15 Minutes Per Image

Each photo needs careful cropping to remove walls, frames, shadows, reflections. At scale, it's a full-time job.



## Detail Shots Essential

E-commerce buyers need corner crops, signature closeups, condition shots. Nobody does this consistently by hand.



## AI Models Hallucinate

Single-model cropping fails on complex frames, glass reflections, unusual compositions. Error rates above 20%.



## Cost of Errors

Bad crops = bad listings = lost sales. One poorly cropped image costs more than the API call to fix it.

# Art Dealers Process Thousands Monthly

**2M+**

Images processed through the pipeline  
to date

**15 min**

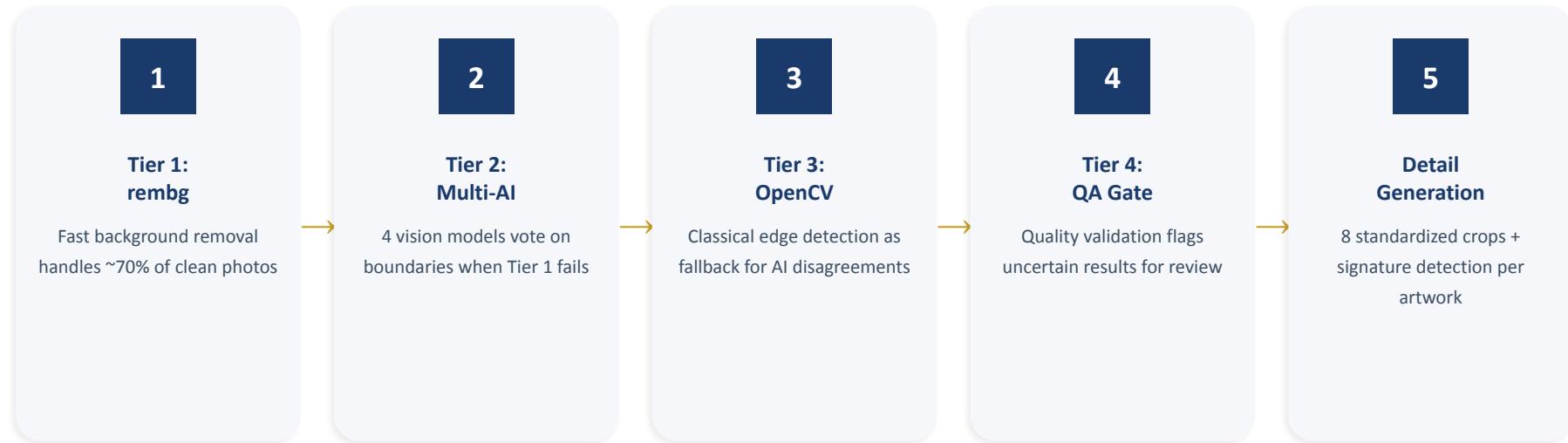
Manual crop time per image—150 hrs  
for 600 pieces

**>95%**

Accuracy with multi-AI consensus  
approach

Art dealers processing hundreds monthly face a choice: hire editors at \$30/hr or automate. This system processes an entire inventory in the time it takes to crop three images by hand.

# Escalate Intelligence, Minimize Cost



*Why spend \$0.05 on GPT-4 Vision when rembg solves it for free? Escalate intelligence only when the problem demands it.*

# Four Tiers of Intelligence, One Perfect Crop

- 4-Tier Pipeline** rembg → AI consensus → CV → QA
- Multi-AI Consensus** GPT-4V, Claude, Gemini, Grok vote
- 8 Detail Crops** Corners, signature, condition shots
- Batch Processing** Process full inventory folders
- Cost Optimization** Escalate only when needed

## TECH STACK

### TIER 1

rembg (instant, free)

### TIER 2

4 AI vision models

### TIER 3

OpenCV edge detection

### OUTPUT

8 detail crops per artwork

### ACCURACY

>95% with all tiers

# Industrial-Scale Image Intelligence

**2M+**

Total images processed through the pipeline

**>95%**

Boundary detection accuracy (tiered approach)

**70%**

Resolved at Tier 1—no AI cost required

**8**

Standardized detail crops per artwork

The tiered approach saves 70% of AI API costs by solving easy problems at lowest cost when needed

## KEY TAKEAWAY

The Art Crop System embodies a core principle: use the cheapest tool that works, and escalate intelligence only when the problem demands it.

### Computer Vision

OpenCV + rembg + AI vision

### Cost Optimization

Tiered processing saves 70% on API

### Scale Engineering

2M+ images through production pipe