CircuitGuard AI

PCB Defect Detection Report

Report ID:	RPT-951ABB98
Generated On:	2025-11-11 18:55:10
Model:	ResNet50 (custom)
Device:	cpu

Executive Summary

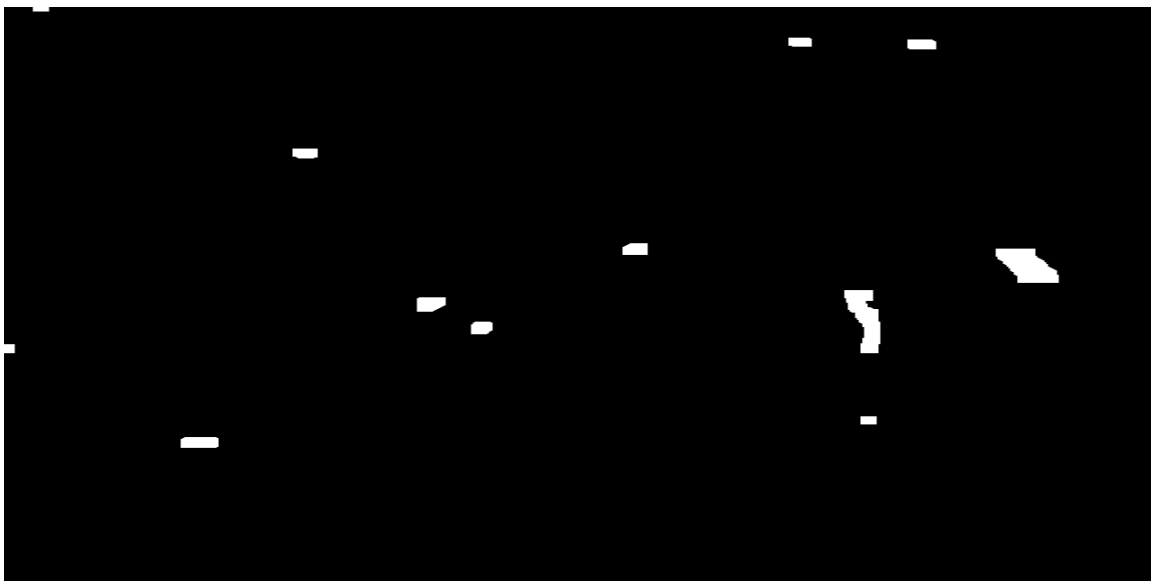Detected 6 defect(s). High:4, Medium:2, Low:0. Avg conf: 79.62%.

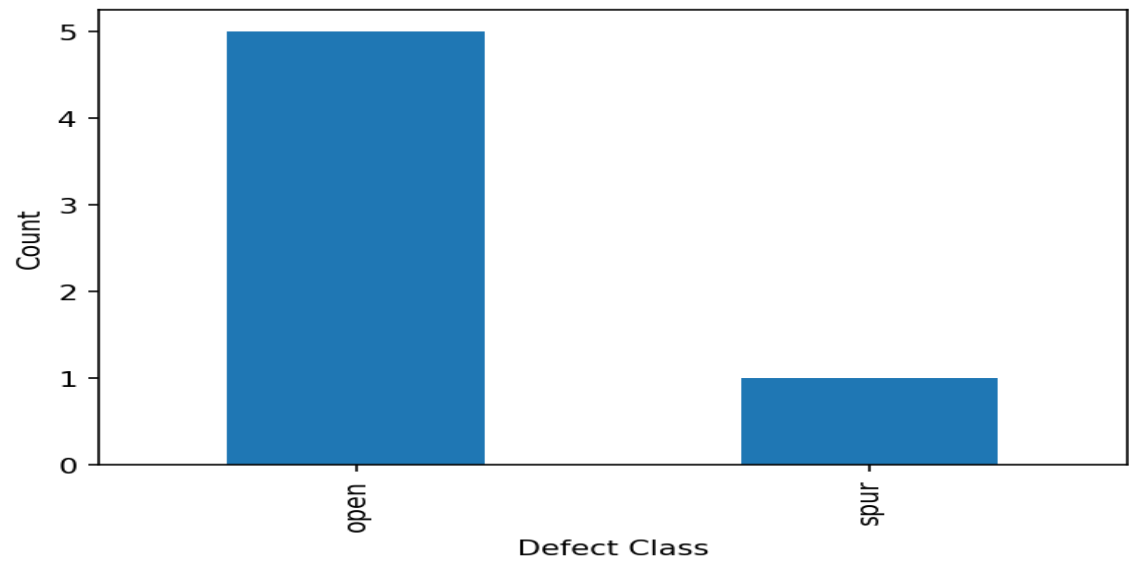| Metric	Value
Total Defects	6
High Confidence (>=80%)	4
Medium Confidence (60-80%)	2
Low Confidence (<60%)	0
Average Confidence	79.62%

Input Images & Difference Map
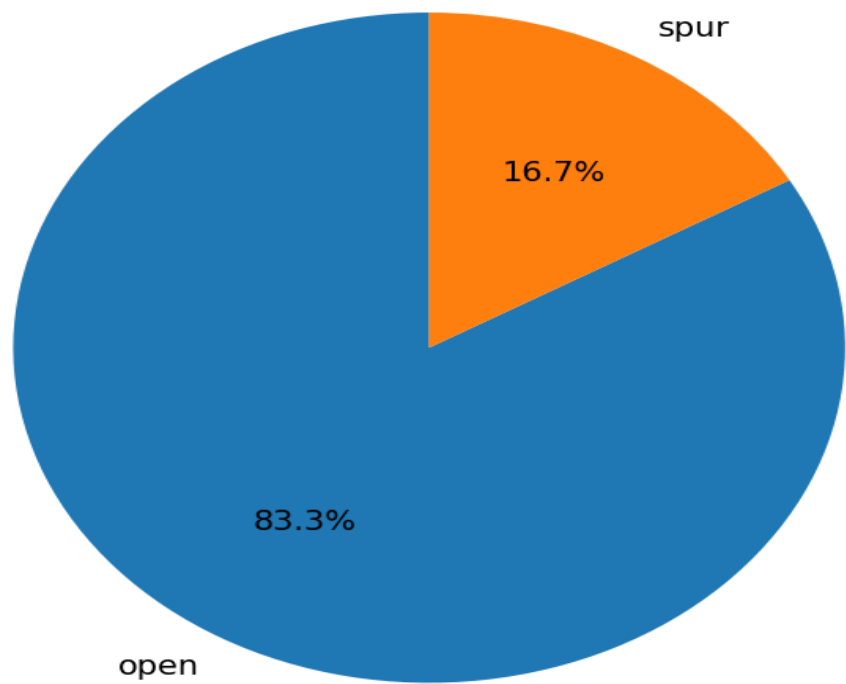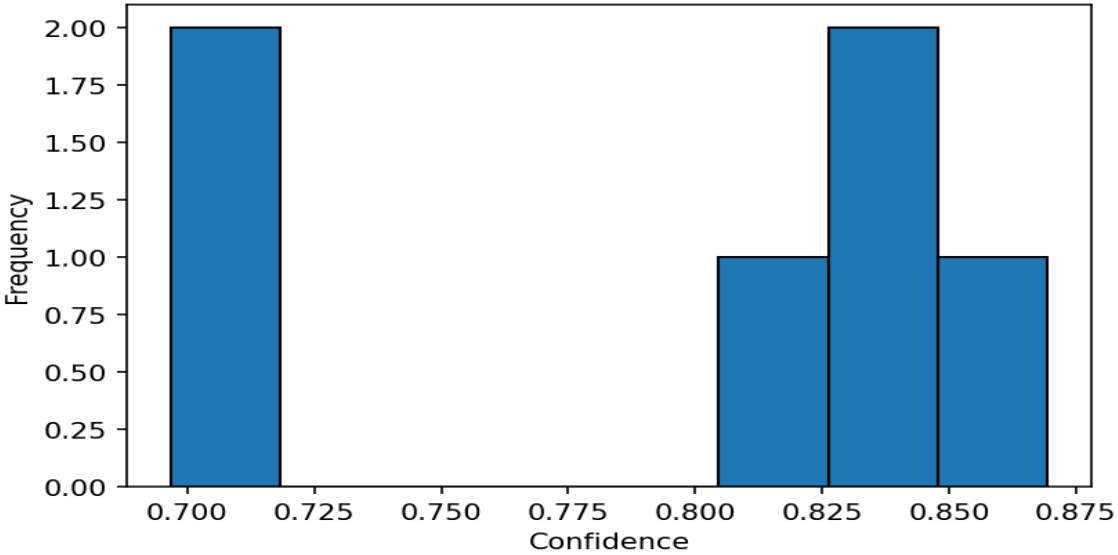
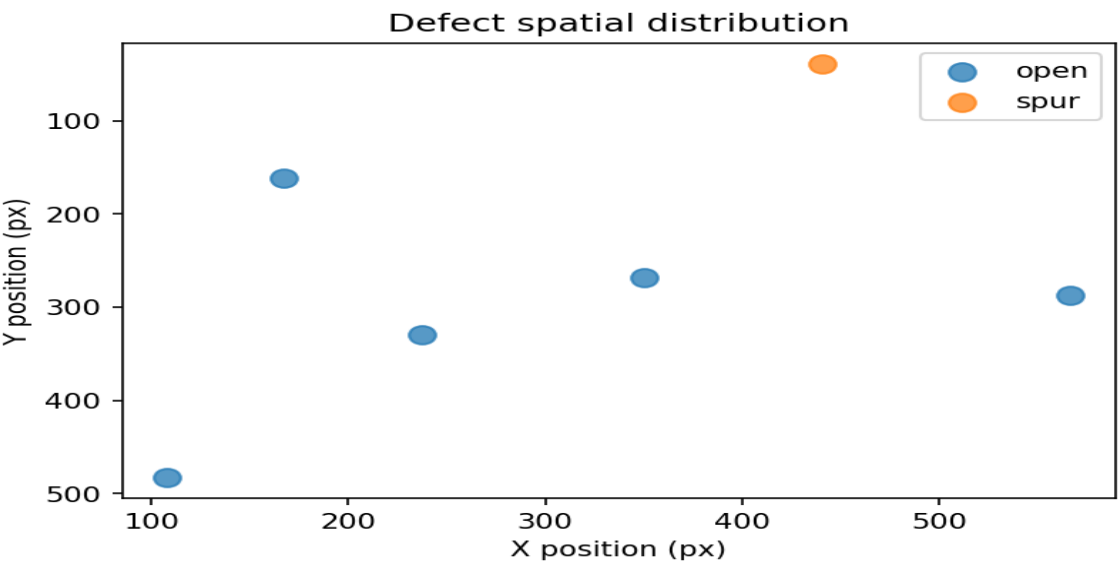*Difference Map:*
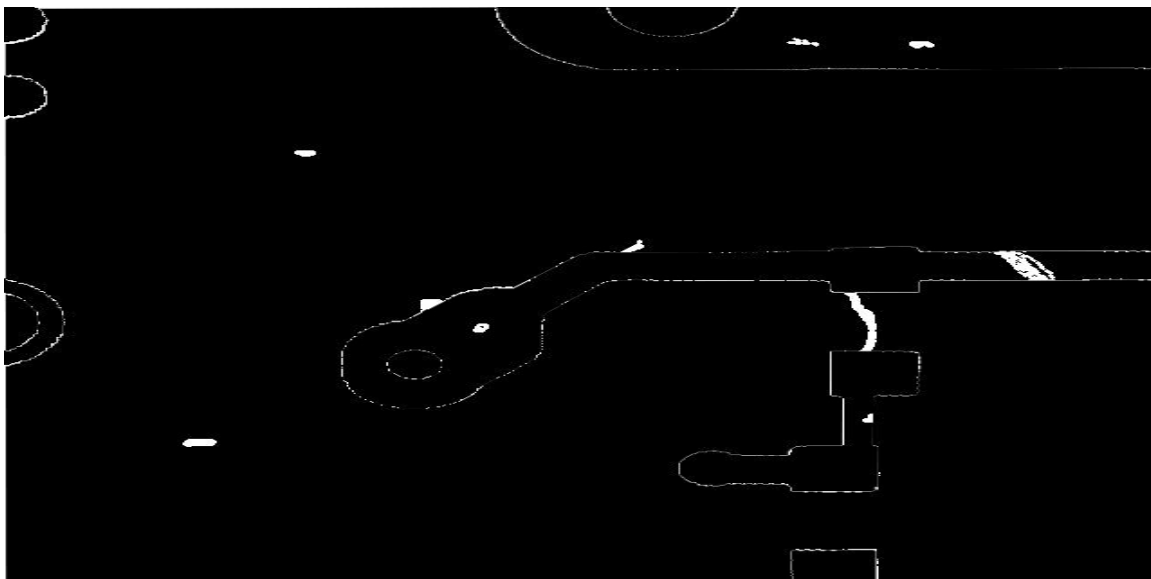
Binary Mask:

Statistical Charts

Defect Count by Class

Defect Distribution (Pie)

Spatial Distribution & Confidence

Defect spatial distribution

Annotated Results & Defect Details
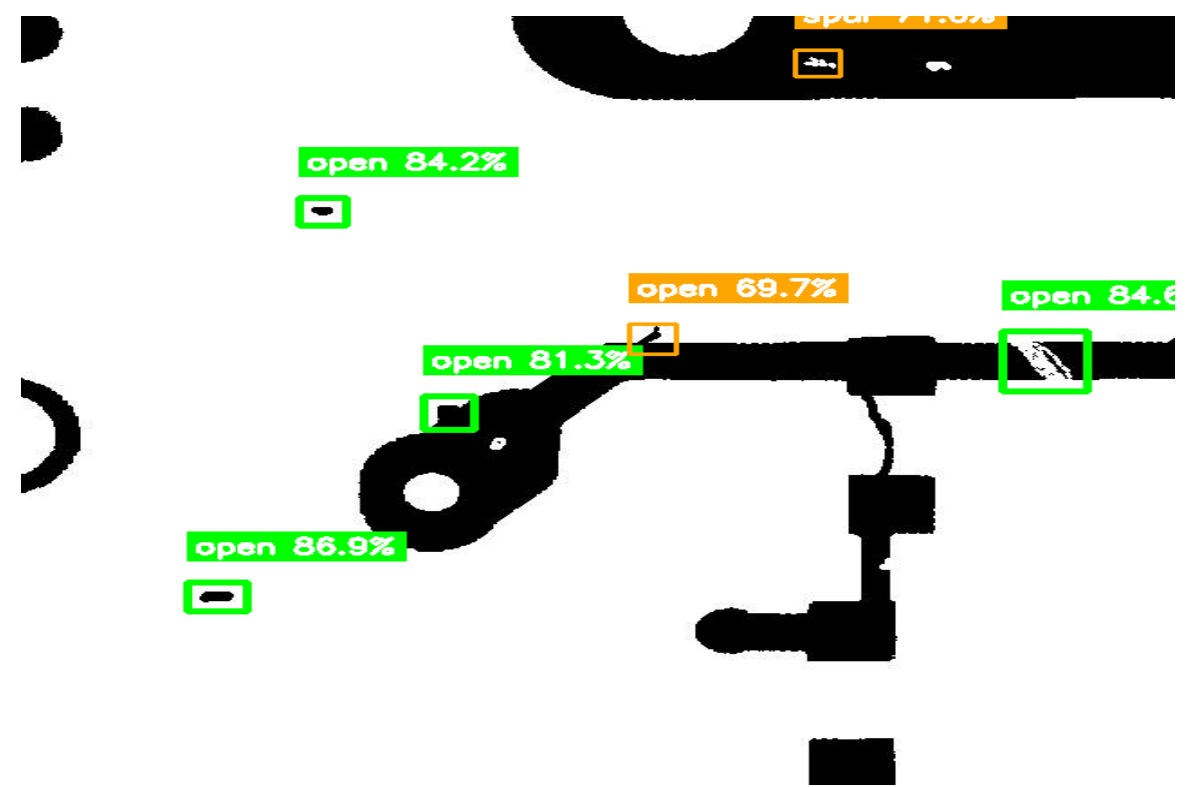
ID	Type	Confidence	Position (X,Y)	Size (W×H)
#1	open	86.9%	(108,483)	33x24
#4	open	81.3%	(237,330)	28x28
#6	open	84.6%	(567,287)	47x50
#7	open	69.7%	(350,268)	26x25
#8	open	84.2%	(167,162)	26x23
#10	spur	71.0%	(441,39)	25x22

Recommendations

If no defects detected, lower diff threshold or min area. Inspect high-confidence defects first.

Conclusion

Automated inspection completed in 0.77 seconds.