

CircuitGuard AI

PCB Defect Detection Report

Report ID:	RPT-78AD8D2F
Generated On:	2025-11-17 22:08:02
Model:	ResNet50 (custom)
Device:	cpu

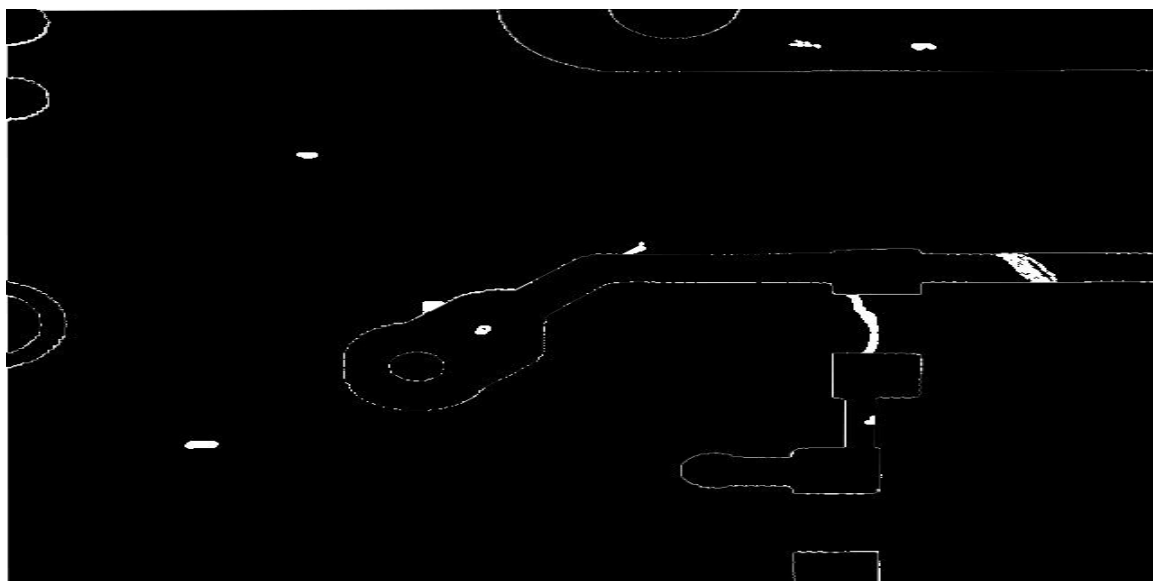
Executive Summary

Detected 3 defect(s). High:1, Medium:2, Low:0. Avg conf: 80.89%.

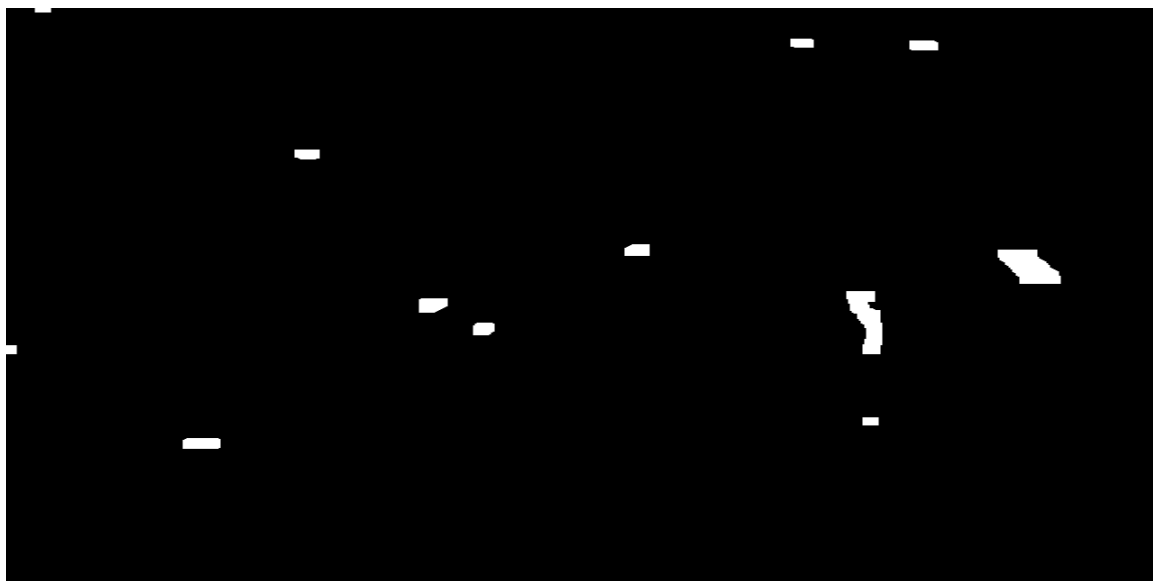
Metric	Value
Total Defects	3
High Confidence (>=80%)	1
Medium Confidence (60–80%)	2
Low Confidence (<60%)	0
Average Confidence	80.89%

Input Images & Maps

Difference Map



Binary Mask

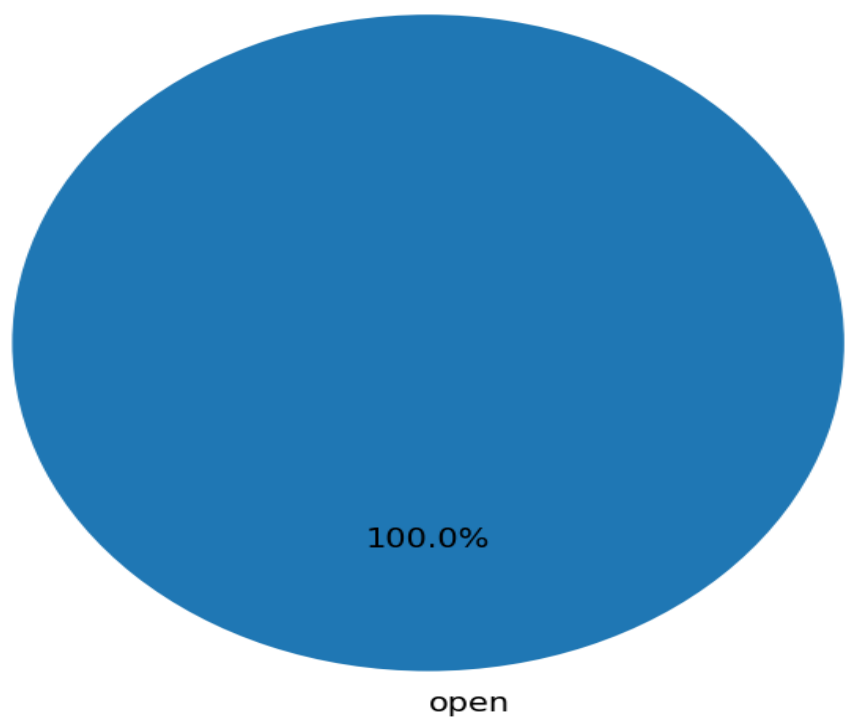


Statistical Charts

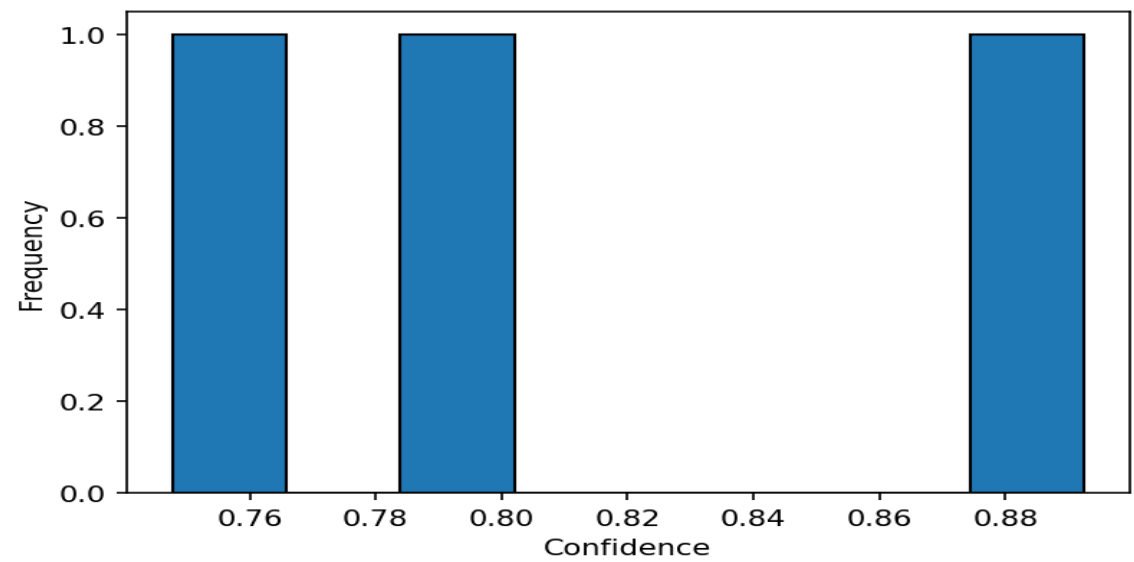
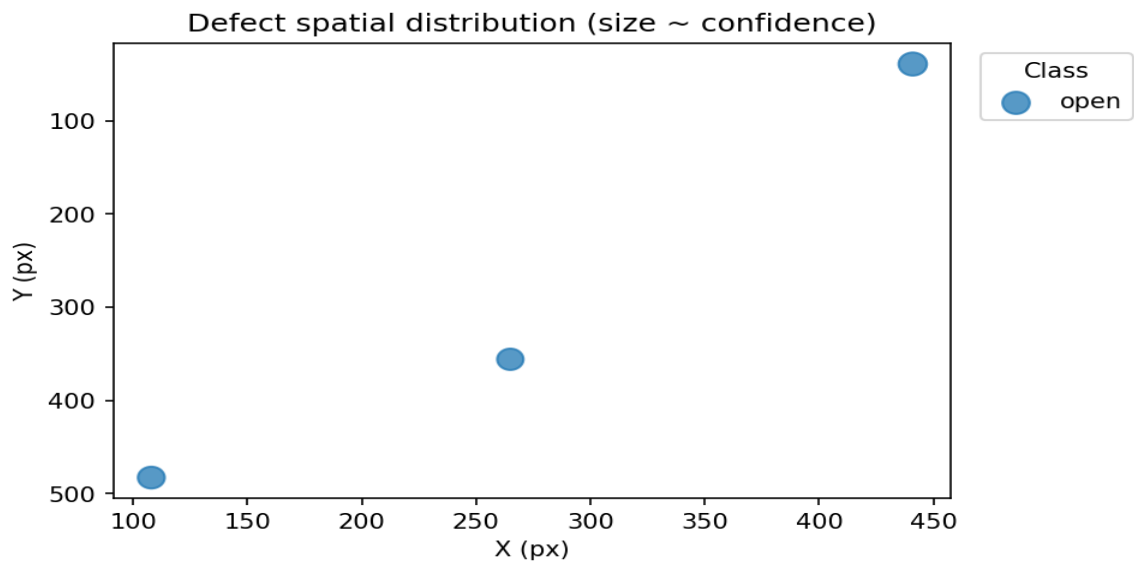
Defect Count by Class



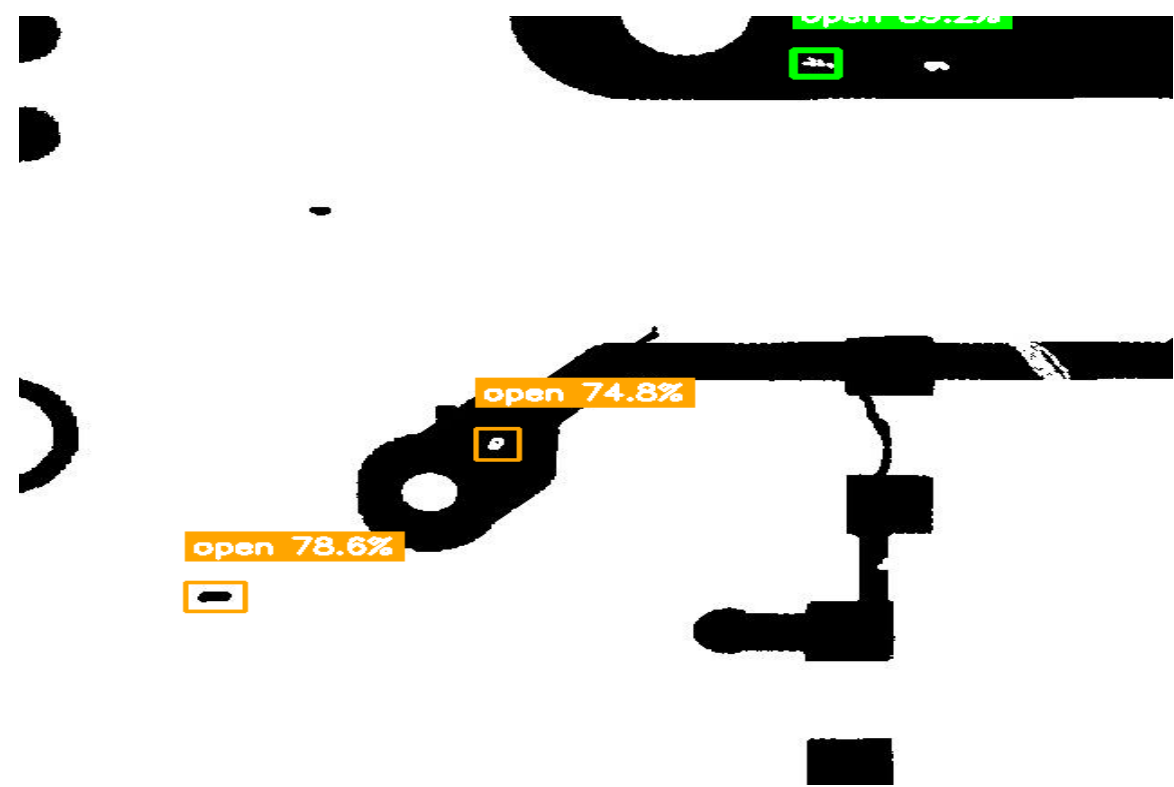
Defect Distribution



Spatial Distribution & Confidence



Annotated PCB & Defect Table



ID	Type	Confidence	Position (X,Y)	Size (WxH)
#1	open	78.6%	(108,483)	33x24
#3	open	74.8%	(265,356)	24x26
#10	open	89.2%	(441,39)	25x22

Recommendations

Inspect high-confidence regions first. If too many false positives, increase min ROI area or confidence threshold.

Conclusion

Automated inspection completed in 2.54 seconds.