CircuitGuard AI

PCB Defect Detection Report

Report ID:	RPT-2199BE31
Generated On:	2025-11-17 22:33:49
Model:	ResNet50 (custom)
Device:	cpu

Executive Summary

Detected 2 defect(s). High:1, Medium:1, Low:0. Avg conf: 80.12%.

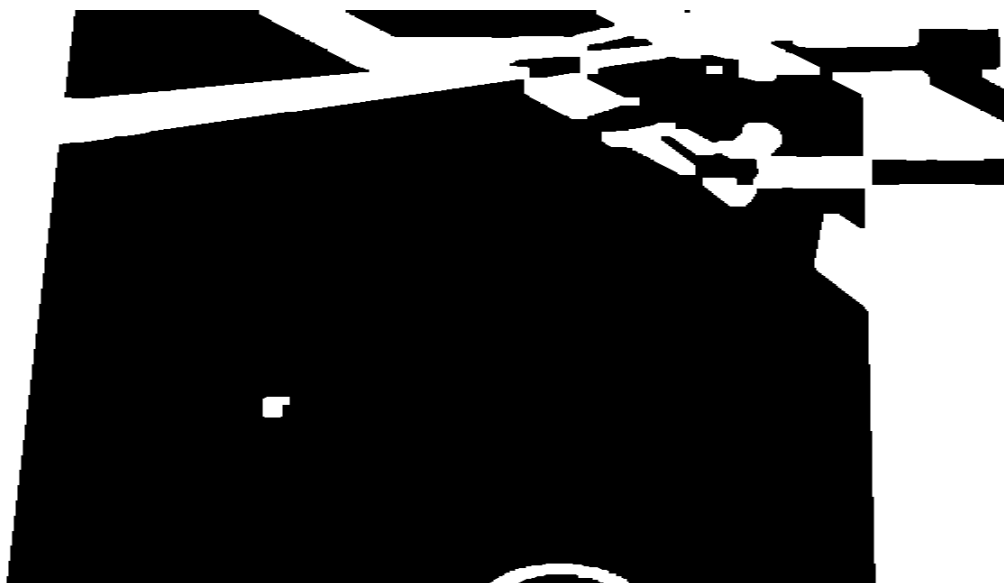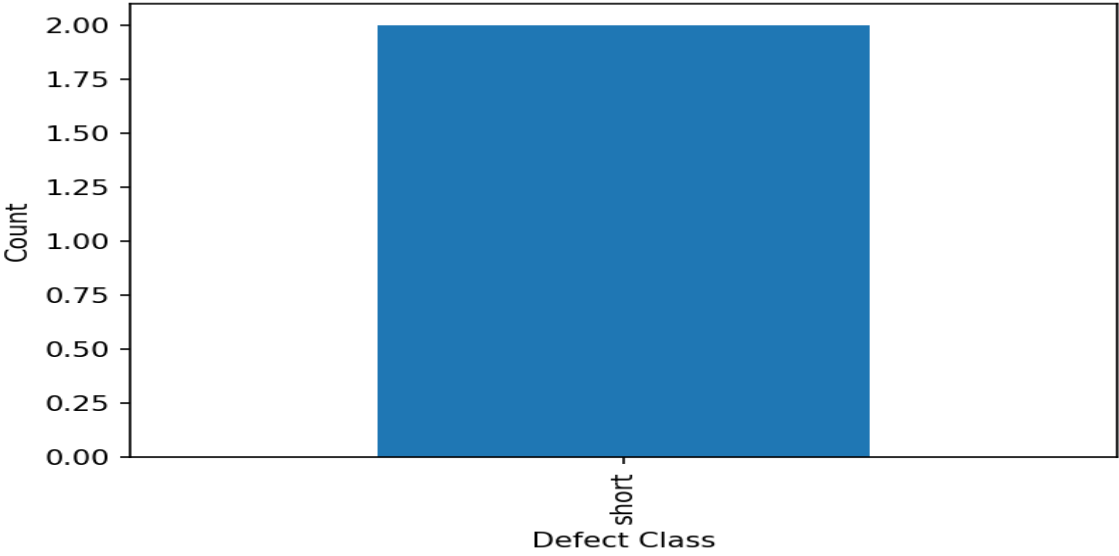| Metric	Value
Total Defects	2
High Confidence (>=80%)	1
Medium Confidence (60–80%)	1
Low Confidence (<60%)	0
Average Confidence	80.12%

Input Images & Maps
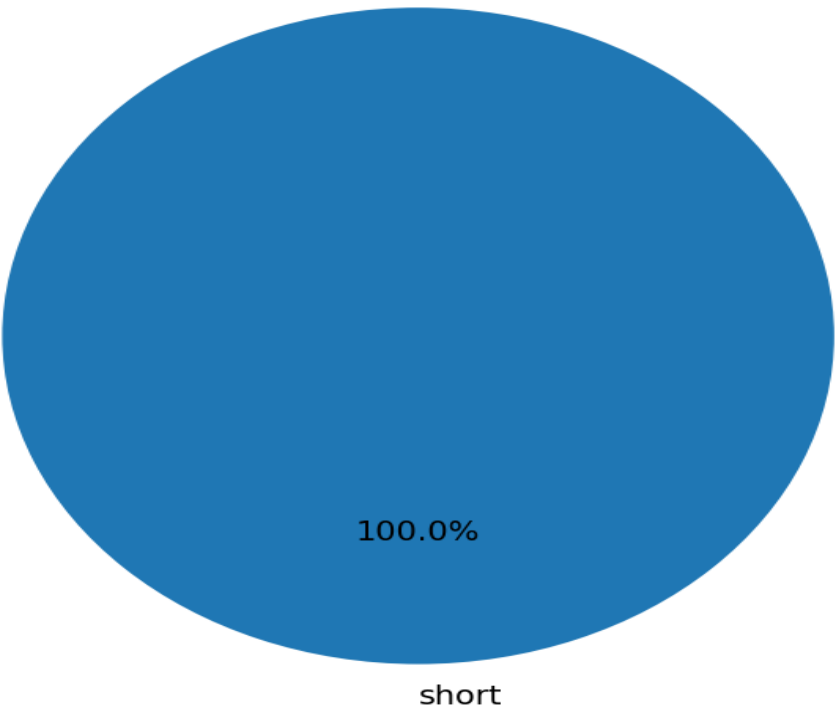
Difference Map
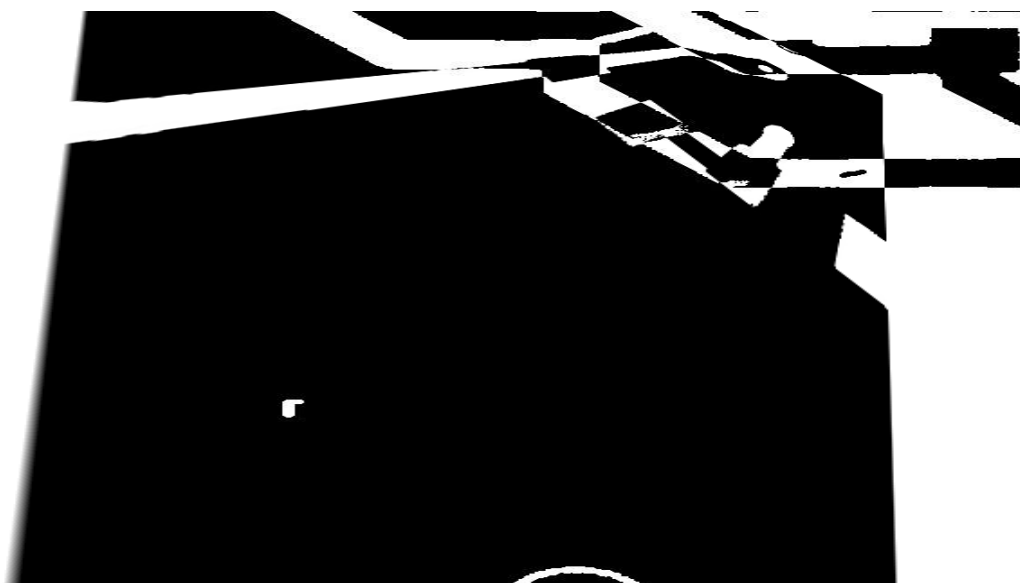
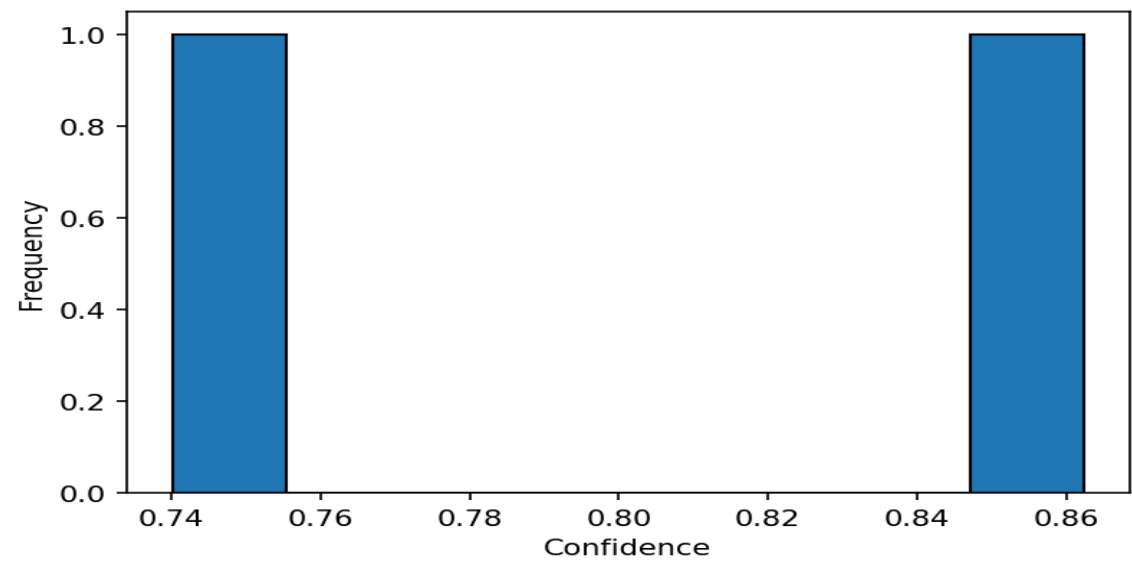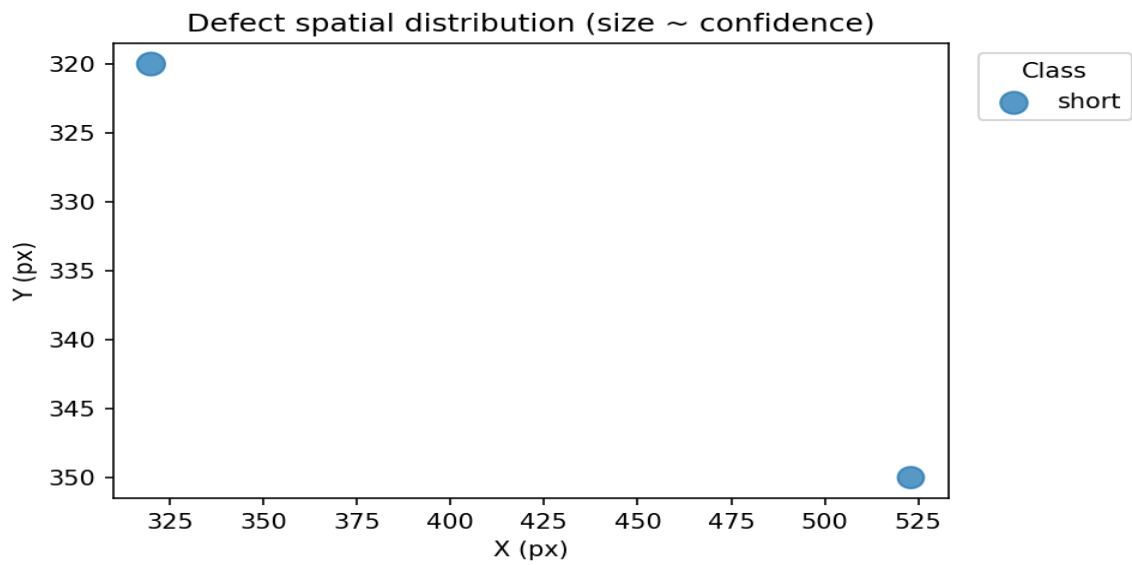
Binary Mask

Statistical Charts

Defect Count by Class

Defect Distribution

Spatial Distribution & Confidence

Defect spatial distribution (size ~ confidence)

Annotated PCB & Defect Table
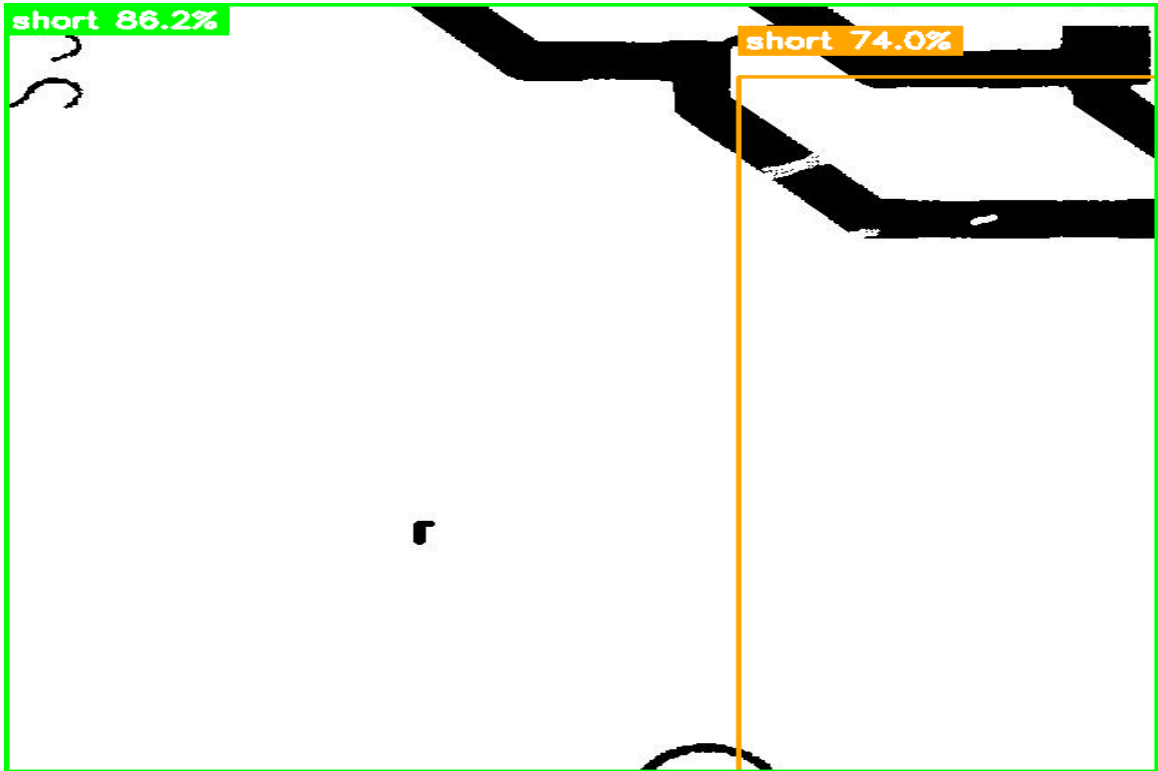
ID	Type	Confidence	Position (X,Y)	Size (W×H)
#3	short	74.0%	(523,350)	233x579
#5	short	86.2%	(320,320)	640x640

Recommendations

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

Conclusion

Automated inspection completed in 0.92 seconds.