CircuitGuard AI

PCB Defect Detection Report

Report ID:	RPT-FAC351AA
Generated On:	2025-11-17 22:11:26
Model:	ResNet50 (custom)
Device:	cpu

Executive Summary

Detected 3 defect(s). High:2, Medium:1, Low:0. Avg conf: 81.90%.

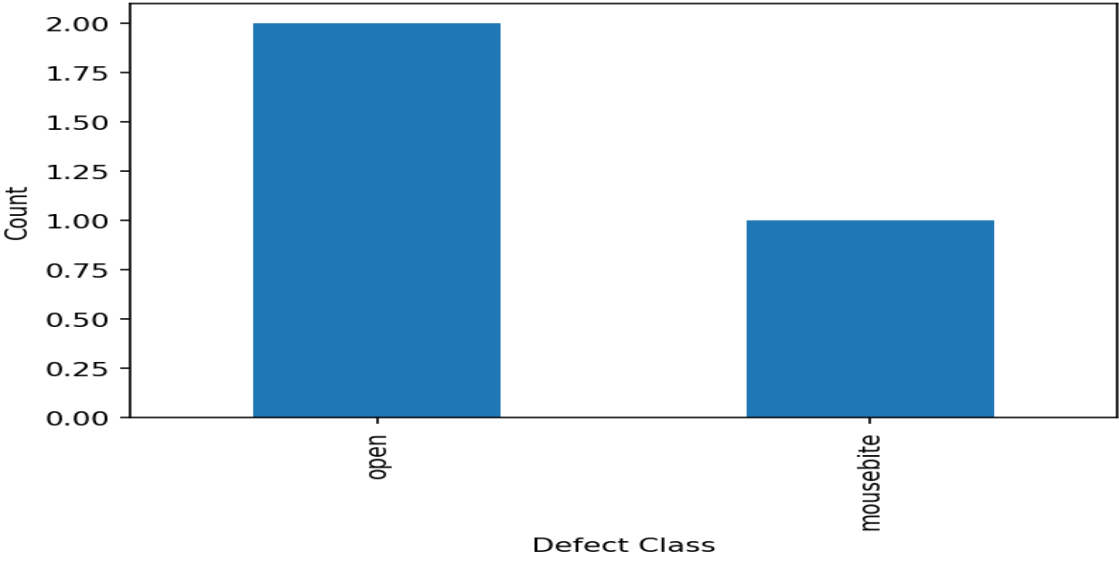| Metric	Value
Total Defects	3
High Confidence (>=80%)	2
Medium Confidence (60–80%)	1
Low Confidence (<60%)	0
Average Confidence	81.90%

Input Images & Maps
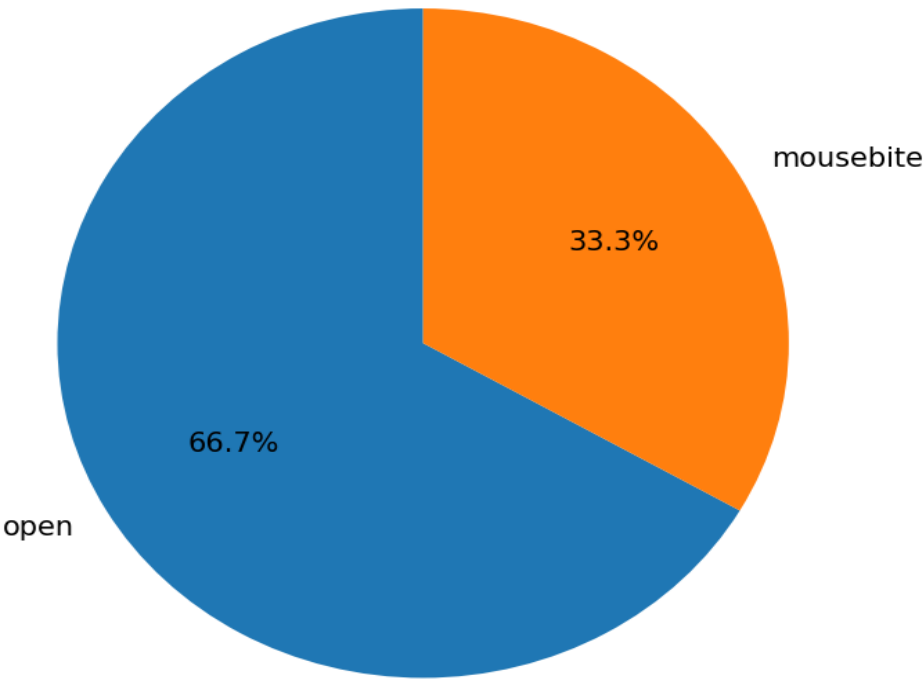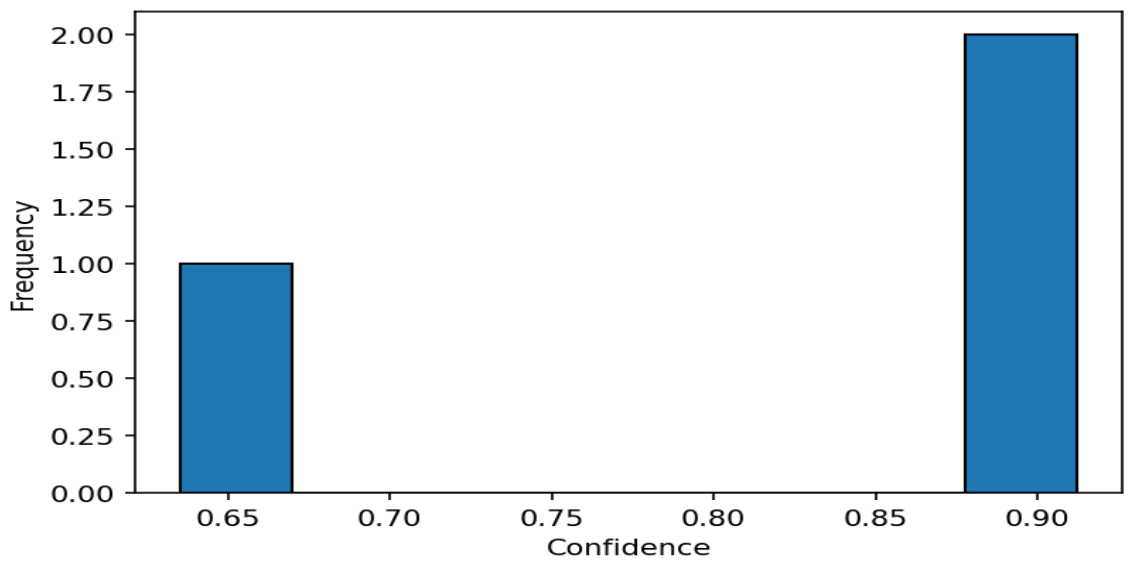
Difference Map
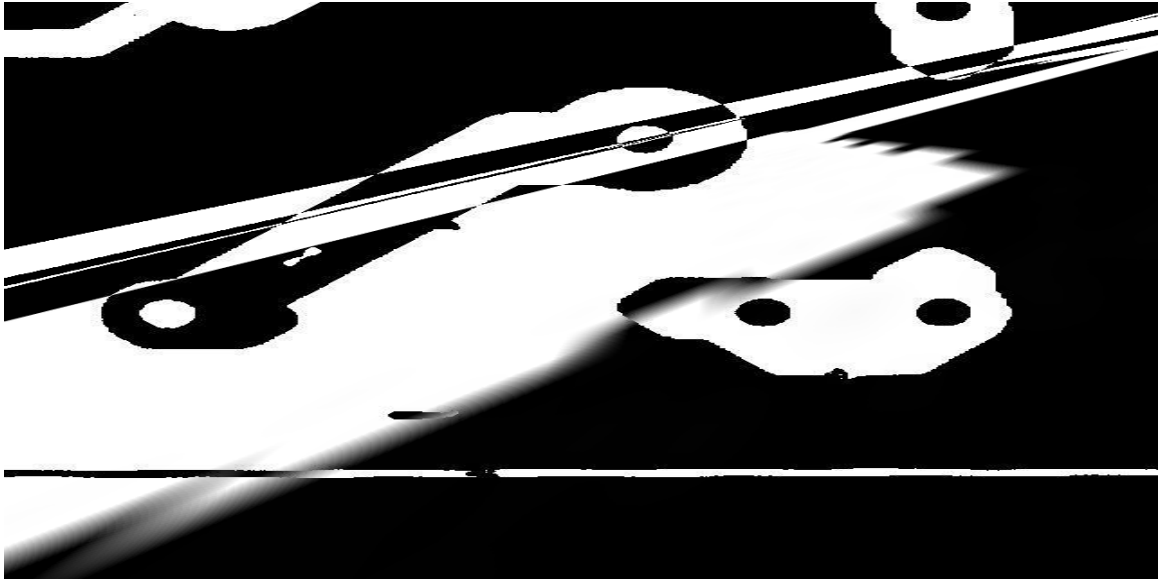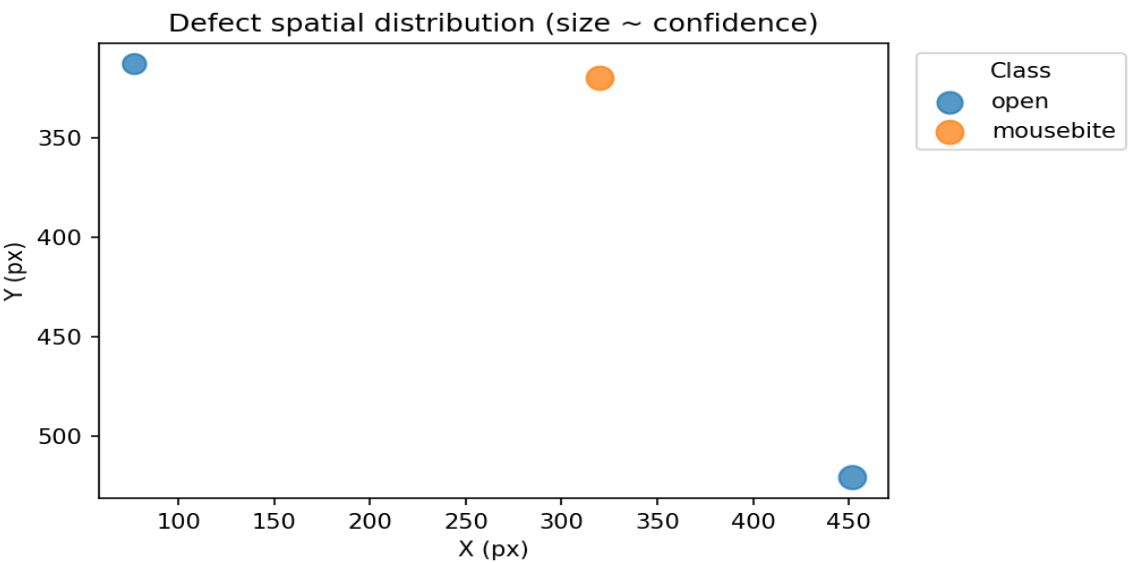

Binary Mask

Statistical Charts

Defect Count by Class

Defect Distribution

Spatial Distribution & Confidence

Defect spatial distribution (size ~ confidence)

Annotated PCB & Defect Table
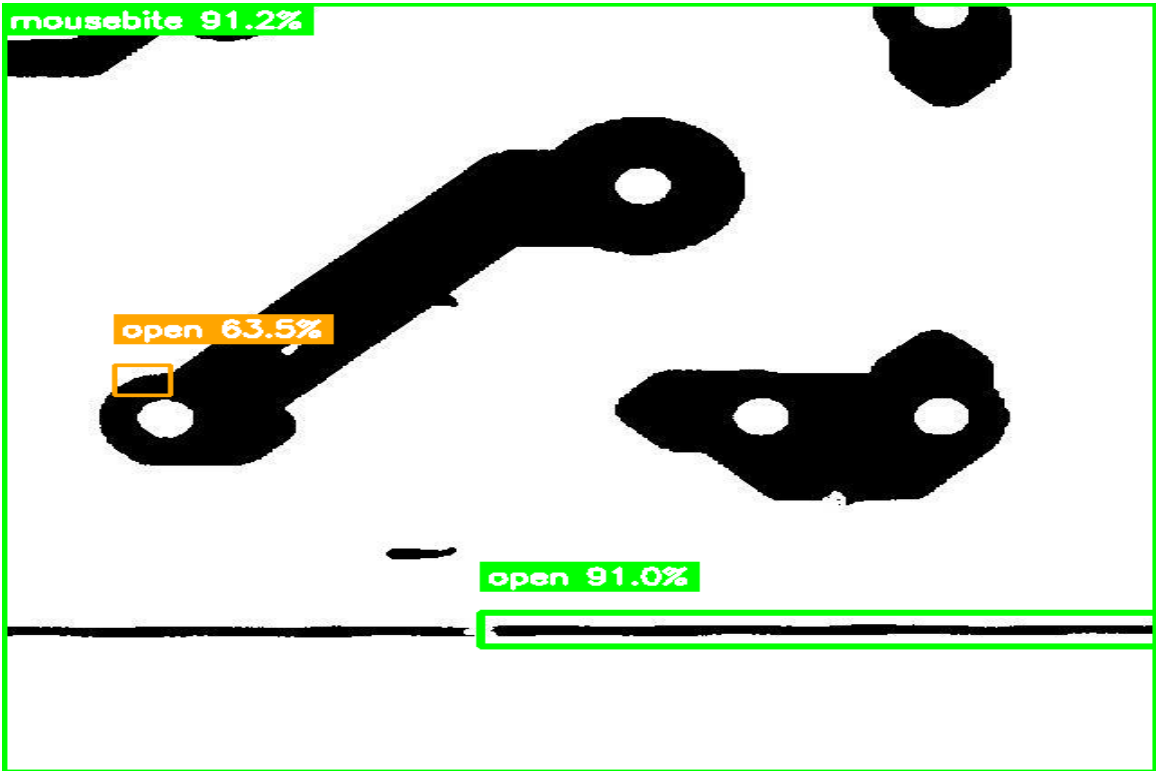
ID	Type	Confidence	Position (X,Y)	Size (W×H)
#1	open	91.0%	(452,521)	375x28
#3	open	63.5%	(77,313)	31x25
#4	mousebite	91.2%	(320,320)	640x640

Recommendations

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

Conclusion

Automated inspection completed in 2.32 seconds.