

# ThreatSentry - Threat Assessment Report

**Model: google/mobilenet\_v2\_1.0\_224**

Attack Type: PGD

*Generated: 2025-11-02 13:54:51*

## Key Metrics

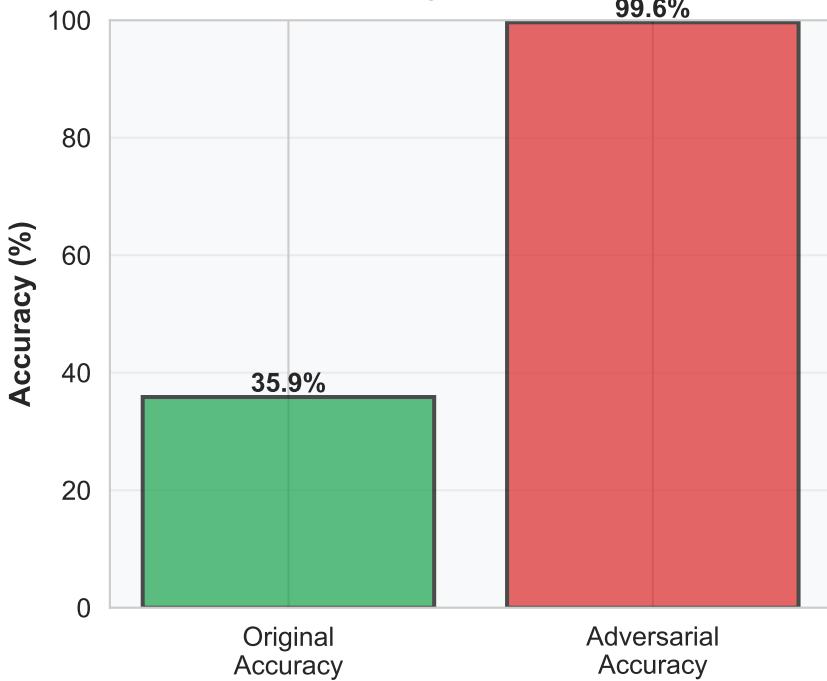
<b>Attack Success Rate:</b>	100.0%
<b>Original Accuracy:</b>	35.87%
<b>Adversarial Accuracy:</b>	99.64%
<b>Accuracy Drop:</b>	-63.78%
<b>Execution Time:</b>	153.20s
<b>Images Tested:</b>	50

## Threat Level Assessment

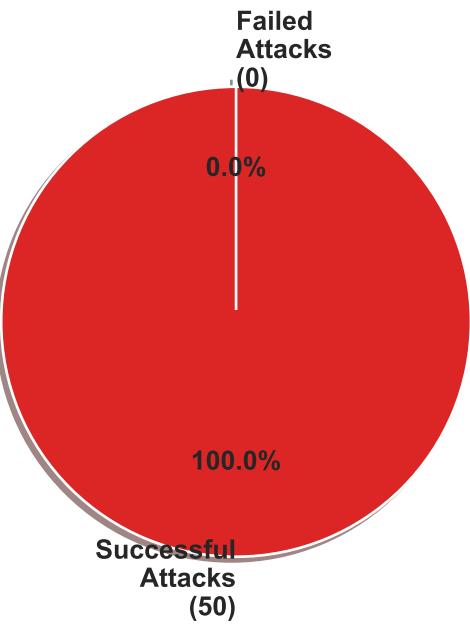
**HIGH RISK**

# Detailed Analysis

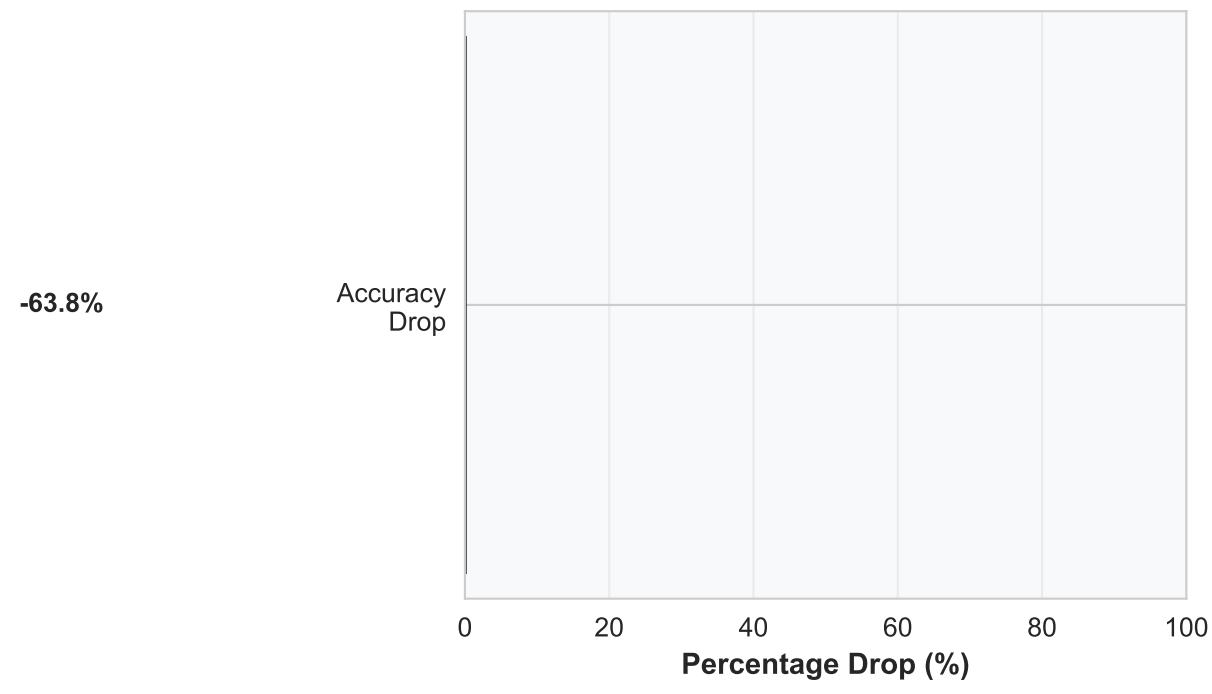
## Accuracy Comparison



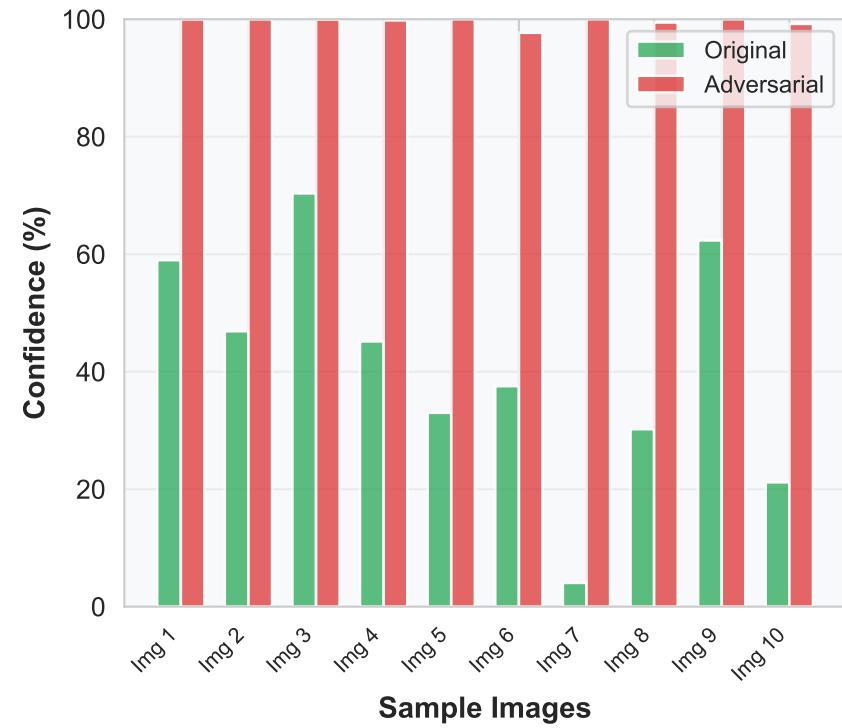
## Attack Success Distribution



## Model Robustness Impact



## Confidence Comparison (Sample)



# Detailed Analysis & Recommendations

## Assessment Summary

Successfully executed PGD attack on model google/mobilenet\_v2\_1.0\_224 using 50 test images . Attack success rate: 100.0%. Average original accuracy: 35.87%, Average adversarial accuracy: 99.64%. The attack successfully fooled the model in 50 out of 50 cases.

## Security Recommendations

### 1. Implement Adversarial Training

- Retrain your model with adversarial examples to improve robustness
- Use techniques like FGSM, PGD during training phase

### 2. Add Input Validation & Preprocessing

- Implement input sanitization and anomaly detection
- Use defensive distillation or feature squeezing

### 3. Deploy Ensemble Methods

- Use multiple models with different architectures
- Implement voting mechanisms for predictions

### 4. Continuous Monitoring

- Set up real-time performance monitoring
- Detect and alert on unusual prediction patterns

### 5. Regular Security Audits

- Conduct periodic threat assessments
- Stay updated with latest attack techniques