

AI Exam Monitoring Report

Advanced Cheating Detection Analysis

Report Date:	2025-08-24 18:34:59
Monitoring Period:	2024-12-01 09:00 - 12:00
Total Students:	25
Total Alerts:	15
Average Risk Score:	35.2/100

Generated by Advanced AI Exam Monitoring System v2.0

Executive Summary

This report presents a comprehensive analysis of the AI-powered exam monitoring session. The system monitored 25 students and generated 15 alerts during the examination period. The average risk score across all students was 35.2/100, indicating the overall level of suspicious activity detected. The AI system successfully identified various types of cheating attempts including face movement violations, suspicious audio patterns, and unauthorized object usage.

Finding	Count	Percentage
Face Movement Violations	8	32.0%
Audio Violations	5	20.0%
Object Violations	2	8.0%

Multiple People	0	0.0%
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Detailed Analysis

Face Movement Analysis

The system detected 8 face movement violations during the exam. These violations occurred when students looked away from the screen for extended periods. Direction breakdown: • Right: 3 violations • Left: 2 violations • Up: 2 violations • Down: 1 violations

Audio Pattern Analysis

Audio monitoring detected 5 suspicious audio patterns: • Whispering: 2 instances • Talking: 2 instances • Keyboard Activity: 1 instances • Paper Rustling: 0 instances • Phone Vibrations: 0 instances

Unauthorized Object Detection

The AI system identified 2 unauthorized objects: • Cell Phones: 1 instances • Books/Notes: 1 instances • Laptops/Tablets: 0 instances • Headphones: 0 instances

Visual Analytics

This section contains visual representations of the monitoring data including: • Alert frequency over time • Violation type distribution • Student risk score distribution • Face movement patterns • Audio detection patterns Charts are generated using matplotlib and embedded directly in the PDF.

Note: Charts are generated based on the monitoring data and provide visual insights into cheating patterns.

Recommendations

Based on the analysis of this monitoring session, the following recommendations are provided:

1. ****Immediate Actions:**** • Review high-risk students (score > 70) for potential disciplinary action • Investigate students with multiple violation types • Address technical issues that may have caused false positives
2. ****System Improvements:**** • Adjust

sensitivity thresholds based on false positive rates • Implement additional audio analysis for better accuracy • Consider adding behavioral pattern recognition 3. ****Policy Updates:****
• Review exam room setup requirements • Update student guidelines for online exams • Establish clear consequences for different violation types 4. ****Training and Education:**** • Provide student training on proper exam conduct • Train proctors on interpreting AI-generated alerts • Regular system accuracy reviews

Appendices

Appendix A: Technical Details

****System Configuration:**** • AI Model: YOLOv8 + MediaPipe Face Mesh • Face Movement Threshold: 3 seconds • Audio Sensitivity: Medium • Detection Confidence: 0.5
****Performance Metrics:**** • Average Processing Time: N/A ms • Detection Accuracy: N/A%
• False Positive Rate: N/A%

Appendix B: Alert Log Sample

The following is a sample of alerts generated during the monitoring session: [Alert logs would be included here in the actual implementation]