

EXAMGUARD PRESENTATION

Ensuring Integrity in Online & Offline Exams

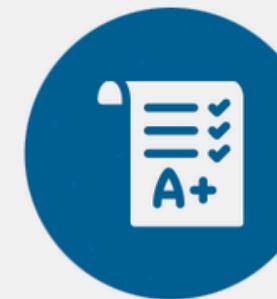


"Why Exam Monitoring Needs AI?"



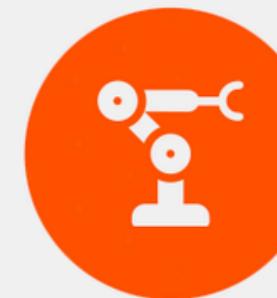
Inefficiency of Traditional Methods

Traditional invigilation often leads to human errors and inefficiencies.



Rise in Online Exam Malpractice

Increasing instances of cheating in online exams highlight the need for better oversight.



Need for Automated Systems

Automated systems are essential to combat the growing trend of online exam malpractice.



Real-time Detection of Irregularities

AI can instantly identify suspicious activities during exams, ensuring integrity.



Reduction of Manual Workload

AI reduces the burden on human invigilators by automating monitoring tasks.

“How Our AI Exam Monitoring Works”

AI-Powered System

Our AI system supports both online and offline exams, enhancing exam integrity.



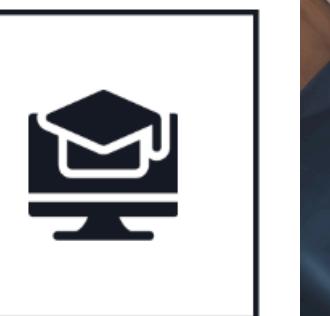
Cheating Detection

Utilises computer vision and behaviour analysis to identify potential cheating.



Integration with College Websites

Seamlessly connects with college platforms for real-time monitoring and alerts.



Automated Reports

Generates automated reports that provide evidence of any detected cheating attempts.



Advanced AI Features for Exam Security



AI-driven face & gaze tracking

Utilises AI technology to monitor student focus and attention during exams.



Hand & object detection

Detects unauthorized items that may be used for cheating during exams.



Hidden device detection

Identifies concealed electronic devices like phones and smartwatches.



Cheating probability scoring

Scores cheating risk as low, medium, or high based on detected behaviour.



Automated alerts & reports

Generates real-time alerts and reports to keep faculty informed.



Online Exam Monitoring

"AI-Based Online Exam Security"



Screen Monitoring

Detects tab switching and use of multiple screens during exams.

AI-Powered Proctor

Utilises AI for real-time face and voice recognition to ensure authenticity.

Audio Analysis

Monitors audio to detect whispers or background voices during assessments.

Deepfake Detection

Identifies deepfakes to prevent identity fraud in online examinations.

Real-Time AI Surveillance in Exams

Ensuring Integrity in Physical Exams with Technology



Multi-Camera Tracking

Utilises multiple cameras to monitor student behaviour during exams.



Gesture and Movement Detection

AI technology detects hand gestures and eye movements to identify potential cheating.



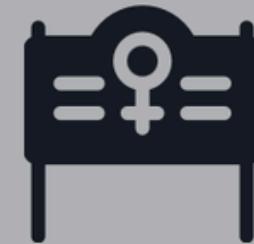
Collaboration Detection

Identifies and monitors collaborations between students during exams.



Heatmap Analysis

Generates heatmaps to identify zones of suspicious activity in the exam hall.

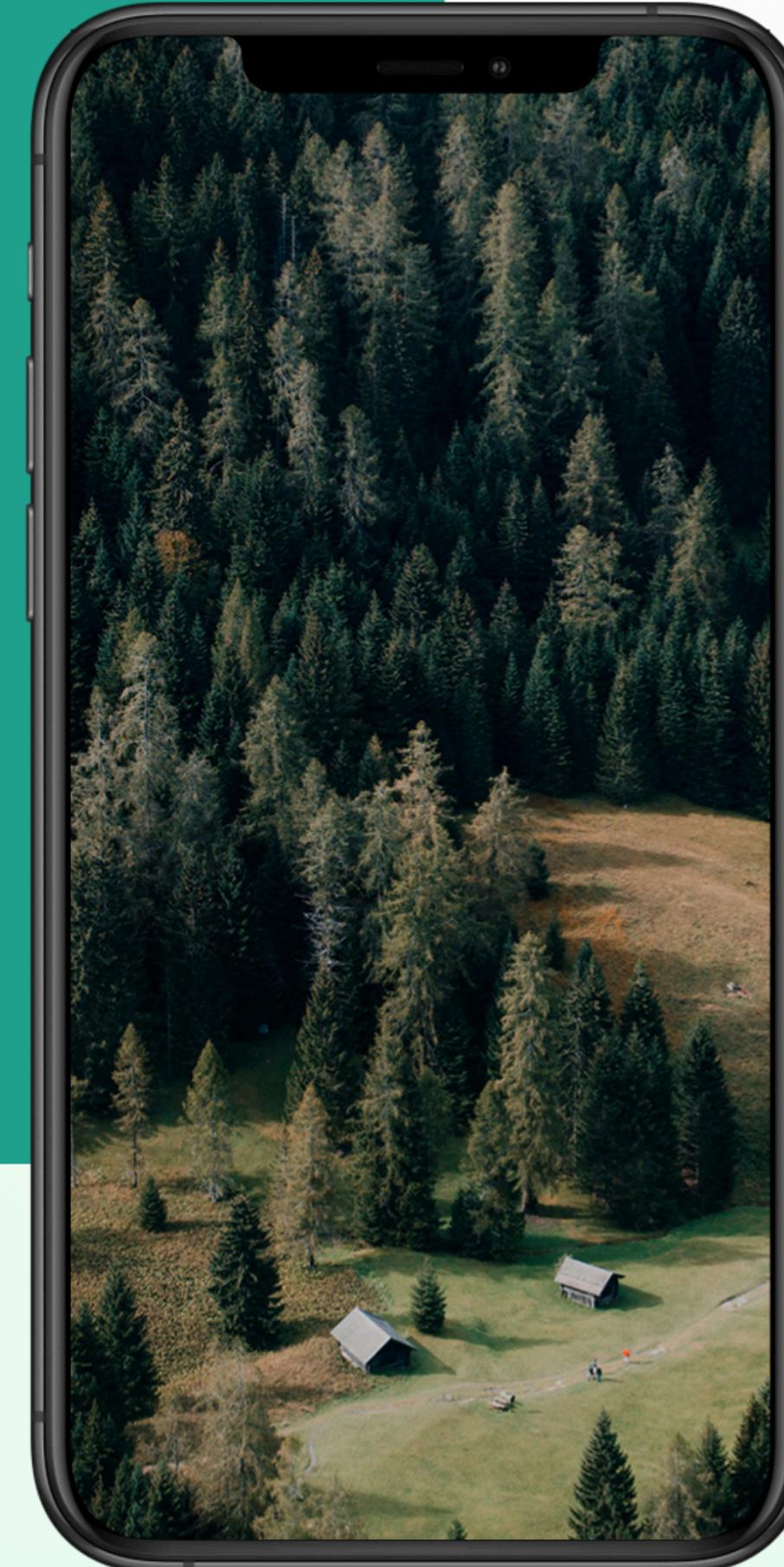


Automated Alerts

Sends automated announcements to address detected rule violations promptly.

Technology Stack & AI Model

Explore the components of our tech stack



AI & ML Models

Utilise OpenCV and TensorFlow/Keras for deep learning applications.

Backend Technologies

Employ FastAPI, Flask, and Node.js for robust backend architecture.

Database Solutions

Integrate PostgreSQL and Firebase for efficient data management.

Frontend Frameworks

Leverage React.js and Tailwind CSS for a dynamic user interface.

Deployment Platforms

Utilise AWS, Google Cloud, and Vercel for scalable deployment.

Student Dashboard & Reporting System

Automated detection and reporting of cheating behaviour

Behaviour Type	Description	Action
Cheating	AI detects clear evidence	Immediate report to faculty
Suspected	Unusual behaviour flagged for review	Review required
Not Cheating	Normal exam behaviour	No action needed

Future Enhancements & Scalability

"Future Roadmap: Scaling AI in Education Security"



Voice Recognition AI

Implement AI to detect whispering and answer-sharing among students.



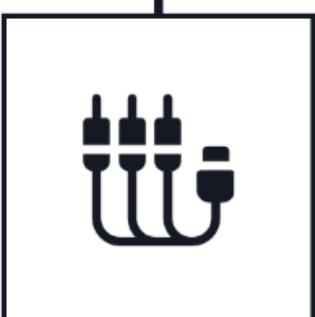
Real-time Behavior Scoring

Utilise scoring systems for predictive analysis of cheating behaviours.



Biometric Authentication

Enhance security with biometric methods to prevent impersonation.



Integration with LMS Platforms

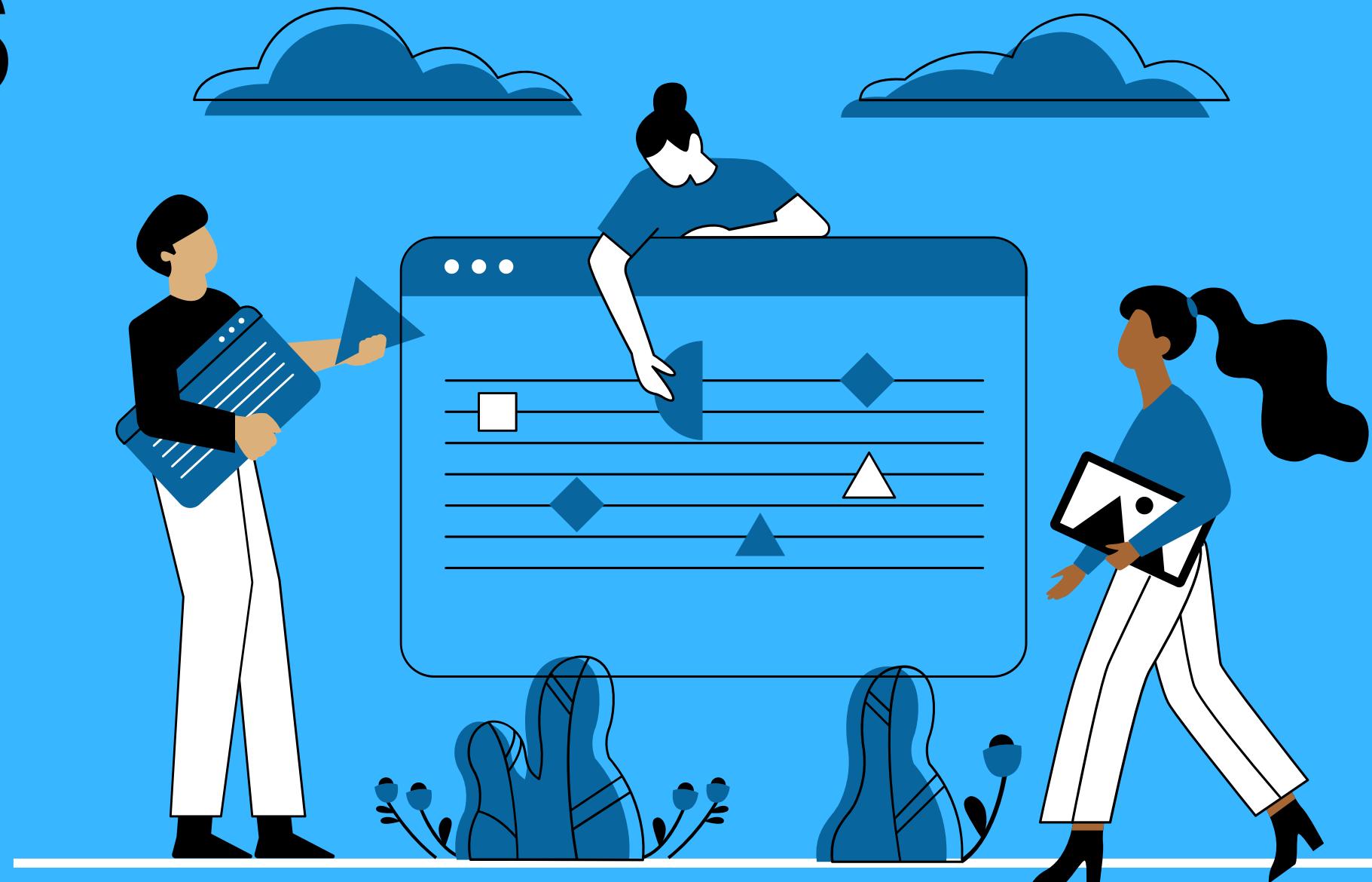
Seamlessly integrate with platforms like Moodle, Blackboard, and Google Classroom.



CONTACT US

Visit us at

Github Repository



THANK YOU

PATH FINDERS