Web Based Face Recognition System

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As online studies increase, so does online cheating.
Types of cheating

• Access to information
• Denial-of-Service attacks
• Authentication fraud
How to stop cheating?

Authentication

• Personal questions
• Security token
• Software token
• Biometric authentication
Biometrics

• Fingerprint recognition
• Voice recognition
• Face recognition
What does this project propose?

To build an online face recognition system
Design

TRAINING
• Learn new faces
• Treat the photos
• Create database

RECOGNITION
• Detect face
• Recognize face
Choosing the framework

<table>
<thead>
<tr>
<th>Feature</th>
<th>OPEN CV API</th>
<th>LAMBA LABS API</th>
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<tbody>
<tr>
<td>Diversity of algorithms</td>
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<td>More powerful image processing</td>
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<td>Simplicity</td>
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<td>Cloud services</td>
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<td>Faster setup</td>
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<td>Less Coding languages needed</td>
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</tbody>
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Block diagram

MAIN

TRAINING
- Album view
- Entry view
- Submit Entry
- Rebuild Album
- Clear All

RECOGNITION
- Recognize

WEBCAM
MASHAPE CLOUD

API
Web design and functionality
Web Based Facial Recognition System

Training  Recognition
Example
Example
Image recommendations

When uploading

• One face per photo
• Frontal portraits
• Good lighting
• Focus
• Minimum five photos per entry

When recognizing

• Only one face in front of the camera
• Facing the camera
• Good lighting
• Both eyes visible
Conclusions

Future Improvements
- Continuous recognition
- Authentication
- Compatibility with other browsers
- File uploading

Goals achieved
- Functional face recognition
Thank you.