



Bitwise Arbiter

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EXECUTIVE SUMMARY

Objectives

Implementation of a machine learning strategy that is able to monitor and comprehend human behaviour.

Goals

- ▶ Monitoring and coordinating the online examination sessions of students.
- ▶ Setting a framework to detect anomalies in students behaviour
- ▶ Create timely tailored examination reports
- ▶ Providing real-time assistance to students during online exams.
- ▶ Enabling fair online examination.

Solution

To monitor students behaviour during online examinations, we propose a system that incorporates multiple machine learning architectures.

- ✦ Eye motion tracking
- ✦ Facial recognition
- ✦ Pose estimation
- ✦ Rule based system.

Project Outline

- To meet the specification needs of the client, the model will be implemented using the python programming language.
- To ensure modularity and cross compatibility an API will also be delivered, allowing for pipeline applications.
- Due to the computational intensity of the model it would be best hosted on a remote server with high-end hardware resources and used on-demand, as to reduce overhead costs.

Challenges

Providing real-time analytics of online examinations with minimal delays (processing higher frames per second)

BUDGET

Estimate for Delivery of Closed Beta

This is an estimate of the cost of delivering a closed beta solution. The closed beta solution would be able to work with 1000 students simultaneously as an initial start.

Description	Cost
Item 1	N/A
Item 2	N/A
Item 3	N/A
	N/A
Total	
