

VISOR REPORT | ShengBao

Summary

Push Power Matrix, a student with the matrix number 2100840D, presented their final-year project aimed at assisting overworked teachers. The project involves a website designed to help teachers mark assignments more consistently and efficiently, thus saving time. The primary users are teachers and educators, but the website can be used across multiple sectors on campus. Key features of the website include:

- Hume SDK Detection:** Presumably for emotion analysis or user behavior insights.
- AWS Transcribe:** For converting speech to text.
- GPT-3:** For generating human-like text, potentially for providing feedback or summarizing content.
- Gaze Estimation:** Likely used to assess attention or engagement.
- Natural Language Processing (NLP):** For understanding and processing human language.
- Tone Analysis:** To gauge the sentiment or emotional tone of the speech or text.
- Picture Detection:** Possibly for recognizing and processing images within the assignments.
- Final PDF Report:** To summarize the analyzed and processed work into a cohesive report.

The project aims to streamline the grading process, thereby alleviating the workload of teachers and ensuring consistency in marking.

Speech Analysis

Strong

The speaker has a clear, loud and expressive tone of voice.

Enthusiasm — 4 / 5

Clarity — 3 / 5

Text Analysis

The speakers' introductory and concluding sentences are fair.

Professionalism — 2 / 5

Gaze Estimation

The presenter maintains eye contact throughout the video.

Eye contact — 61%

Business Value

Strength: Addressing a Real Pain Point The project targets a significant issue in the education sector—teachers being overwhelmed by grading and administrative tasks. By offering a solution that automates and assists in marking, the project directly addresses a real and widespread problem. Automating grading processes can save teachers considerable time, allowing them to focus on more interactive and engaging aspects of teaching, such as student interaction and curriculum development.

Strength: Technological Innovation The integration of cutting-edge technologies like GPT-3 for language processing, AWS Transcribe for speech-to-text, and gaze estimation for engagement analysis adds substantial value. These features can provide nuanced feedback and deeper insights into student performance and engagement. The combination of tone analysis, picture detection, and NLP can result in a holistic evaluation of student submissions, beyond just grading, potentially enhancing the quality of feedback.

Strength: Scalability The solution is designed to be used across multiple sectors on campus, indicating scalability. If successful in one institution, it could be adopted by others, both within and beyond the educational sector, such as corporate training and online education platforms.

Weakness: Implementation Complexity Implementing and integrating multiple advanced technologies can be complex and costly. Schools and educational institutions might face difficulties in adopting and maintaining such a system without significant technical support. Handling student data, including videos and personal information, requires stringent privacy and security measures. Ensuring compliance with data protection regulations (such as GDPR) could be challenging and resource-intensive.

Weakness: Reliability and Accuracy The accuracy and reliability of AI-based grading can vary. Mistakes or biases in automated grading could lead to mistrust among teachers and students. The system's effectiveness will depend heavily on the robustness of its algorithms and data sets.

Weakness: User Adoption Teachers and educational institutions might be resistant to adopting new technologies, especially if they are comfortable with traditional methods. Ensuring user buy-in through training and demonstrations of the system's efficacy will be crucial.

Recommendation: Pilot Programs Conduct pilot programs in a few schools to test the system's effectiveness, gather feedback, and make necessary adjustments. This can help in fine-tuning the technology and proving its value before a broader rollout.

Recommendation: User Training and Support Offer extensive training for teachers and administrators to ensure they are comfortable using the new system. Provide ongoing technical support to address any issues that arise during the initial adoption phase.

Recommendation: Focus on Data Security Implement robust data security and privacy

measures to protect student information. Regular audits and compliance checks should be conducted to maintain trust and ensure legal compliance. Recommendation: Feedback Mechanisms Establish mechanisms for continuous feedback from users. Regular updates and improvements based on user feedback can help in maintaining the system's relevance and effectiveness.

Hume Emotion Details

Here's what we found.

Dominant vocal emotion — Interest

Dominant facial emotion — Calmness

Slide Images

Does the presenter have slides with images?

% of slides with images — 0

Transcript

Hi. My name is Push Power Matrix number 2100840 D. And I'm presenting my visor project. Yes. The background of this project is that because teachers these days are overwhelmed and overworked. So basically what we are trying to is you are trying to provide a helping hand to these teachers to allow them to be able to mark more consistently and save a lot of their time. So like the users are obviously the teachers and educators of our school of the body. And also this website can be used throughout campus in multiple sectors. As long as students record an MP video for teachers to mark. The features of our website is hume SDK detection, AWS, transcribe GPT three gaze estimation, natural language processing and tone analysis along with picture detection and the final PDF report so that you can see the summarized work