

Part 1: Project Description

Our project is a computer vision-based solution designed to help brands, marketing teams, and event organizers measure the visibility and prominence of their branding in visual media. By leveraging advanced machine learning techniques, the system analyzes video footage to detect and track specific logos, measuring their screen time and providing detailed insights into advertisement performance. Users will upload a video along with the logo image they want to analyze via a simple web-based dashboard. The platform processes the footage to generate targeted analytics focused solely on the selected brand's visibility. This approach allows marketers to evaluate the return on investment for individual campaigns, optimize future strategies, and provide event organizers with clear and actionable sponsorship insights. Unlike existing solutions that focus on live broadcasts or broad analyses, our project offers flexibility and precision by supporting pre-recorded videos and concentrating on one brand at a time, making it adaptable to various industries and media formats.

Part 2: User Stories

As a marketing team member, I want to track advertisement performance to evaluate the return on investment of my campaigns.

As a marketing team member, I want to upload a video to the platform to analyze my brand's visibility in the footage.

As a marketing team member, I want to compare visibility metrics across multiple videos so I can identify trends for future campaigns.

As a brand owner, I want to know how much my brand is being shown to figure out my brand's prominence on social media.

As a brand owner, I want to use the analytical data outputted by the program so I can present it to stakeholders.

As an event organizer, I want to analyze video content from my events to measure the exposure of sponsor logos, so that I can show the value of sponsors to potential clients.

As an event organizer, I want to identify underutilized advertising spaces, so that I can maximize profits from sponsors.

As a sports organization employee, I want to attract more sponsors by showing detailed reports of their logo exposure.

As a sports organization employee, I want to evaluate sponsor visibility across different camera angles, so that I can optimize logo placements or camera placement for future reference.

As a driver, I want to upload dashcam footage to identify sponsors on billboards or vehicles along my commute, so that I can better understand the marketing presence in my area.

As an event videographer, I want to track how often a sponsor logo is captured in my footage so that I can ensure I meet my contract obligations with sponsors.

As a small business owner, I want to upload videos of local events to see if my sponsorship logos are visible so that I can decide whether to sponsor similar events in the future.

As a content creator, I want to upload videos to track how often my sponsor logos are visible so I can provide analytics to my sponsors.

As a tour leader, I want to analyze video footage of tourist destinations, so that I can measure how often local businesses are visible and optimize my route based on local businesses.

As a nonprofit organization, I want to track a sponsor logo in video footage from fundraising events, so that I can prove sponsors' contributions were correctly displayed.

As a potential sponsor of an event, I want to be able to see if the place that the advertisement would go, gets much screen time so that I can decide if it is worth doing or not.

As a potential sponsor of an event, I want to be able to see which event venues would provide my brand with better visibility, so that we could decide to sponsor the event that would provide the best return on investment.

As an event venue manager, I want to be able to identify what spots tend to get the most and the least time on camera so that I know what I should be charging brands to display their advertisements in those spots.

As a marketing company, I want to be able to show a brand how often their logo is displayed at events so that I can easily justify the costs of our marketing services.

As a marketing team, we want to be able to upload dashcam footage to analyze which of our billboards and signs were most visible with our logo, so that we can best decide where our advertisement would be the most effective.

As a member of a large company, I want to easily track how often our logo is being seen across a large number of different events and venues, so we can know if our advertising strategy is effective.

As a small business owner, I want to have simple and easy-to-understand analytics of the effectiveness of my advertisement so that I can focus on running other aspects of my business.

As a marketing professor, I want to be able to analyze logos and advertisements in videos so that my students can see the effectiveness of product placement.

As a television station, I want to be able to analyze the screen time that our sponsors are getting, so that we can meet the contract obligations that we have with them regarding the amount of visibility their brand was to get.

Part 3: Glossary

Machine Learning: allows computers to learn from experience without explicit instructions.

Web-Based Dashboard: A user-friendly interface that allows users to utilize our program and see analytics from uploaded videos.

Return On Investment (ROI): measures the profitability of an investment by comparing its gain or loss to its cost

Analytics: The insights and metrics generated from processing and analyzing data, in this case, related to logo visibility.

Computer Vision: A field of artificial intelligence that enables computers to interpret and analyze visual data from the world.

Artificial Intelligence: the field of computer science focused on creating systems that can perform tasks requiring human intelligence, such as learning, problem-solving, and decision-making.