

## **Part 1: Project Description**

Our project is a computer vision-based solution that is designed to help brands, marketing teams, and event organizers measure the visibility and prominence of their branding in visual media. By leveraging machine learning and image recognition techniques, the system analyzes video footage to detect and track specific logos, measuring their overall screen time and providing detailed insights into the advertisement's performance. Users will upload a video along with the logo image that they want to analyze via a simple web-based dashboard. The platform will process the footage to generate targeted analytics that are focused solely on the selected brand's visibility. Utilizing this approach will allow 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 offer very broad analyses, our project offers greater versatility in regards to different forms of media (sports, concerts, dashcam footage, etc.) and precision by supporting pre-recorded videos and concentrating on one brand/advertisement at a time. This more focused approach offers greater flexibility and greatly reduces the technical skill and business knowledge required to effectively use such a program, making the tool easier to use and more accessible to a broader audience across multiple industries like those of business/marketing and entertainment.

## **Part 2: User Stories**

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

As a marketing team member, I want to have the ability to compare visibility metrics across a variety of different angles/videos so I can identify trends for future campaigns and identify the best ad placements.

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 brand owner, I want to analyze how much time my brand appears in videos, so I can assess my brand's prominence on social media and other platforms.

As a brand owner, I want to use analytical data on brand visibility, so I can present it to stakeholders and demonstrate the value of my advertising efforts.

As a brand owner, I want to compare the visibility of my brand against competitors in the same footage so that I can assess my relative market presence.

As a brand owner, I want to understand how different types of events (e.g., sports, concerts, festivals) impact the visibility of my sponsorship logos so that I can choose the most effective partnerships.

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

As an event organizer, I want to identify underutilized advertising spaces, so I can maximize profits by offering more valuable spots to sponsors.

As an event organizer, I want to provide detailed and accurate reports on sponsor logo visibility, so I can attract new sponsors and retain existing ones.

As a potential sponsor, I want to analyze sample footage of previous events to evaluate the visibility of similar brands, so I can decide whether to invest in sponsorship opportunities.

### **Part 3: Glossary**

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

**Analytics:** The set of different insights and metrics generated from processing and analyzing data, in this case, related to logo/advertisement visibility.