

Lumina Datamatics Creates Alt Text for 130,000 Images Using AI and Reduces Client Spending By 75%



CLIENT OVERVIEW

Our client, a prominent content aggregator specializing in educational materials, manages an extensive repository of diverse content, including over 130,000 images.

PROBLEM

The client needed a swift and cost-effective solution to produce alt text for this vast volume of images while ensuring accuracy and relevance. Major problems included:

- The client had to deal with a repository of over 130,000 images that needed alt text for accessibility.
- Due to time and financial constraints, manual alt text production was proven impracticable.
- The varying metadata across images proved to be a challenge seamlessly integrating into alt text.
- It was critical to strive for accessibility compliance to adequately accommodate a varied user base.
- Ensuring accuracy and contextually relevant alt text for each image presented a dual challenge of quantity and quality.

SOLUTION

Lumina Datamatics devised a dynamic workflow combining artificial intelligence and human review. We have offered the following solutions:

- AI programs were developed based on Convolutional Neural Networks to analyze images, converting visual elements into descriptive content, and determining spatial relationships among elements.
- Pre-trained models generated predictions and probability classes or labels, forming the basis for descriptions.
- Labels were parsed to establish relationships between them, and language models determined probabilities for different word sequences.
- When available, existing metadata was incorporated to create comprehensive metadata for each image.
- Algorithms assembled the labels using language models for meaningful alt text.
- Refinement through fine-tuning enhanced alt text quality and performance, catering to specific requirements.
- Expert review ensured machine-generated alt text's accuracy and relevance, guaranteeing top-notch quality.

RESULT

- The solution enabled the client to swiftly generate alt text for a vast image repository.
- Accessible images improved user experience and compliance with accessibility standards.
- Combining automation with human review ensured cost-effective alt text creation.
- The refined output produced descriptions that accurately conveyed image content.
- Lumina Datamatics' workflow demonstrated scalability for handling large image alt text generation volumes.
- Our client achieved their accessibility goals, enhancing content accessibility and user engagement.
- Client reduced budget by 75% with the help of AI.

ABOUT US:

Globally, 8 of the top 10 publishers and 3 of the top 5 ecommerce retailers trust Lumina Datamatics as their strategic partner in providing content, analytics, and technology solutions. Lumina Datamatics' expert solutions comprise in-house platforms, partnerships with global technology leaders, and more than 3500 professionals across Germany, India, UK, United States, and Philippines. Our clients have reduced time-to-market, optimized business processes, operational efficiencies, and improved competitiveness. For more information, please visit www.luminadatamatics.com.