

Lumina Datamatics Creates Alt Text for 130,000 Images Using AI and Reduces Budget 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. Our clients benefit from the reduced time-to-market for new products and services, optimized business processes, operational efficiencies, improved competitiveness, and relevant insights. Lumina Datamatics' expert solutions comprise in-house platforms, partnerships with global technology leaders, and more than 3500 professionals across Germany, India, the UK, and the United States. This global resource pool services our customers across four continents: North America, Asia, Australia, and Europe.