

NTT DATA Video Analysis Platform

A modular and flexible Artificial Intelligence platform for image and sound analysis

NTT DATA Video Analysis Platform is a modular and highly customizable platform designed to enhance the Video Analysis processes with advanced Artificial Intelligence components. It provides a unique common framework where proprietary and third-party modules seamlessly coexist and effectively cooperate to deliver the best value and experience to NTT DATA clients.

Leveraging the plug-in paradigm, NTT DATA Video Analysis Platform integrates and orchestrates



all the main cloud provider cognitive services on the market, as well as proprietary AI capabilities thanks to the plug-and-play common interface. Thus, enabling adding tailored AI capabilities based on clients' needs and requirements.

Our solution provides a human readable interface to easily interact with AI capabilities, enabling the "human assisted AI" paradigm by supporting operators in the most time-consuming tasks.

Benefits

An end-to-end video analysis platform quickly delivered and fully integrated into customers' processes.

- Modular architecture providing all cognitive service functionalities in one platform
- High scalability adapting the computational power employed based on requests
- High adaptability allowing the creation of tailored services for a specific domain easily
- High readability providing operators with results suitable for validation or modification
- Effortless addition of new capabilities thanks to the plug-in common interface
- Transparent switch from one cognitive service to another
- Proprietary AI modules
- Provides API for integration with customers' systems, processes, and tools
- Vendor independent and deployable on-premise or in a cloud environment

Key Features

1. Plugin Paradigm

Thanks to the plug-and-play common interface our solution allows the integration and orchestration of several cognitive services from different sources including startups.

2. Third Party Connection

Connection to the technology stack of clients' infrastructure.


3. Complete suite of AI capabilities:





Face Recognition. Detection and recognition of people in videos based on their faces




Sentiment Analysis. Emotions analysis and recognition from facial expressions providing time-coded data when emotions change.

 **Action and Salient Scene Recognition.** Recognition of several actions in a video and extraction of salient short videos

 **Object Detection.** Detection and recognition of multiple objects, landmarks, and environments in a video

 **Speaker Recognition.** Recognition of people based on their voices and capabilities to cluster people based on their voices' similarities

 **Automated Subtitling.** Automated dialogues transcriptions in all the main languages

 **Image and Audio Pipeline.** Preprocess of image and audio data for video analysis.

4. Possibility to add new custom capabilities

New custom AI capabilities can be added to satisfy specific needs by choosing between custom models or third parties services

Example Use Cases

Automated Subtitling

Broadcasters have the needs to subtitle the content for compliance and accessibility purposes and continually generate new video that should be subtitled; our solution through the employment of Speech-to-Text technology can automate the generation of subtitles for video clips. Video Analysis Platform enables a fully managed experience, from the enhancement of the quality of generated subtitles to the increase in the number of videos processed, which results in decreasing operational costs.

Augmented Metadata Production

Broadcasters can speed up and optimize information extraction processes on video content usually performed by human operators with consequent savings in time and reduction of management costs Broadcasters can accelerate digital transformation processes by adopting AI capabilities for media content enrichment tasks.

The Video Analysis Platform exploits a modern approach that uses Artificial Intelligence, in particular Computer Vision and NLP techniques to support operators in producing metadata for each video content. The solution exploits several cognitive services to recognize famous people, places, and any other entities according to clients' needs.

AI Sports Match Analysis

SportTech companies can benefit from the adoption of the Video Analysis Platform for improving game analytics in real-time that can be used during or after the match. Moreover, fans' experience can be enhanced by the augmented information generated by the platform such as statistics, insights, and suggestions.

Augmented Video Quality Control

The creation and distribution of media content entail the execution of mandatory processes for Video Quality Control aiming at identifying potential anomalies such as frames' brightness that could diminish the user experience while consuming video content. The process performed by human operators requires 2,5X video duration, so deploying Video Analysis Platform provides automation capabilities to support operators while reducing costs and optimizing resource allocation.

Why NTT DATA?

Thanks to a close collaboration with clients' ecosystems, NTT DATA has developed a strong knowledge and experience of their challenges and needs. This has paved the way for the development of winning AI solutions able to support human operators in different tasks within the Media, Entertainment and Broadcasting industry.

NTT DATA – a part of NTT Group – is a trusted global innovator of IT and business services headquartered in Tokyo. We help clients transform through consulting, industry solutions, business process services, IT modernization and managed services. NTT DATA enables clients, as well as society, to move confidently into the digital future. We are committed to our clients' long-term success and combine global reach with local client attention to serve them in over 50 countries.

For more information

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