MISI Media Server
GPU Enhanced Streaming Performance

Misi Tech inc.

Infinite streaming power for the modern content provider

MISI Media Server offers bare-metal GPU server for high-resolution media streaming, real-time color analysis and CDN indexing; MISI allows easy design and broadcasting of customized movies, live-streams and images, combined with a powerful search engine.

Engineered to use by content-providers, TV stations and video-art studios, MISI graphic engine for color analysis allows smart enhancement of graphical features in video streams while streaming at 4K quality. MISI is offering an end-to-end solution for real-time graphic control, which delivers much better ROI compared to graphic editing in post-production.
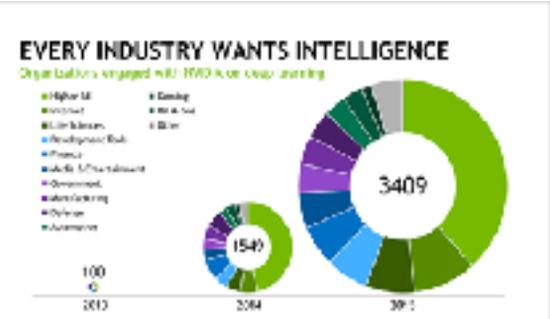
MISI collaborates GPU deep machine learning algorithms to provide online and offline complete real-time solution for layered media analysis and graphic manipulation; MISI analyzes deep graphic information across all of the grid with no delay. Excellent motion tracking techniques allow tracking of stream objects and camera movements.

MISI Media Server gains richer analysis with more scalable applications for filtering, aggregating, and analyzing the continuous collection of data in real-time; it identifies events immediately as they happen, triggers and reacts to relevant events with no delay.

SERVER SPECIFICATIONS

Server Oracle Linux Ubuntu 16.01

GPU NVIDIA Tesla P100

Apache HTTP/HTTPS

OpenGL version 3.1

OpenCV version 3.1

FFMPG for GPU

Single video source for all consumers

Realtime compression of live-streams

Parallel processing of 1000 streams

EVERY INDUSTRY WANTS INTELLIGENCE

❝ We help clients gain richer analysis with more scalable applications for filtering, aggregating, and analyzing the continuous collection of data in real time. ❞

Hybrid-cloud content delivery streaming

Realtime high-resolution content delivery infrastructure

Modern data centers rely on many interconnected commodity compute nodes, limiting the performance needed to drive important HPC and hyper-scale workloads. MISI Media Server uses the NVIDIA Tesla P100, which is the most advanced data center accelerator ever built. MISI Media Server leverages the groundbreaking NVIDIA Pascal™ GPU architecture to deliver the world's fastest streaming node. It is powered by innovative technologies with huge jumps in performance for HPC and deep learning workloads. Deep machine learning algorithms allow real-time analysis of graphical layers and implementation of intelligent filters for each layer.

Content optimization, through real-time intelligent processing of the content, allows full experience of multi-screen and omni-platform content consumption, with customer control over the viewed content. Media is processed in real-time to enhance colors, apply filters, and seamlessly add logos or subtitles. MISI Media Server supports single video source for all consumers, which allows media to be scaled to fit consumers screen only when streamed, introducing tremendous save on bandwidth and file maintenance.

Stream using GPU deep learning techniques

Whether you are interested in detecting logos in the video stream and triggering events for the consumer or receiving an alert for fire detection in streams from surveillance cameras, you need it at real-time. MISI collaborates GPU deep machine learning algorithms to provide online and offline complete real-time Stream Processing, which handles large amounts of data in real-time and gains richer analysis with more scalable applications. Today's alert systems require usage of pattern analysis for all data, across all systems, in real-time, and only a GPU based stream processor is capable to filter, aggregate and analyze continuous collection of data in milliseconds, so nothing gets overseen or outdated.

MISI graphic engine for color analysis enables the consumer to enjoy their content anywhere they go - on their smartphone, tablet, TV and even VR-set, while giving the content provider a consolidation of content in a single source - one place that can store, sort, distribute, and measure engagement of content initiatives.

MISI graphic engine for color analysis allows intra-processing of the stream by the producer and saves time on post-processing, which introduces a significant return of investment (ROI) for post-production editing and live-broadcasts color enhancements.

GRAPHIC ENGINE OVERVIEW

High-resolution stream processing

GPU/CPU synchronization in real-time

Parallel processing of 1000 streams

Realtime graphic control and color enhancements

Color detectors for real-time object analysis

Event triggering using cascaded layer analysis of stream in real-time

Stream injection of logos, subtitles, overlaying textures and more.

Dynamic update of GL programs

Supports GL Active Region of Interest

Preserving original quality on any end-device

Analyze the continuous collection of data

MISI graphic engine for color analysis performs real-time two-tier processing of each frame in a stream, analyzing each frame simultaneously on the GPU (for deep-learning algorithms) and CPU (for traditional Computer Vision algorithms) and extracting maximum data in minimum time. Processing and analyzation of frames is done using original color frames, layered as several color spaces (not just grayscale) to extract maximum of the available data. Using deep machine algorithms for content discovery optimization by real-time intelligent processing of the content is the gateway for data-driven social experience combined with automatic personalization of the consumed content.

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NVIDIA.
INCEPTION PROGRAM