

AUDIOVISUAL CONTENT ANALYSIS AND TRUSTED AI SOLUTIONS FOR MEDIA



Audiovisual Content Analysis and Trusted AI Solutions for Media

Fraunhofer IDMT offers long-standing expertise that combines audiovisual content analysis, machine learning and AI, security and privacy protection that can be deployed to transform and improve media workflows.

We develop innovative and trusted technologies for automatic metadata extraction and enrichment, audio and video matching, content verification, search and recommendation.

We offer research and software development to help media companies integrate AI-driven technology into their businesses in the best possible way.

Our technologies substantially lower costs, improve metadata quality, and increase the speed and efficiency of your operations. They also open up new business opportunities, avoid legal risks, and strengthen your USP and reputation.

Derive new benefits and drive new insights with content analysis tools for media management and delivery developed by Fraunhofer IDMT.

Explore our technology showcases to discover how our tools can help your business today.

Automatic Metadata Extraction & Enrichment

Automatic metadata extraction and enrichment can improve metadata quality and consistency across your business, dramatically enhance the capabilities for content search and discovery and significantly lower costs compared to manual metadata annotation tasks.

Beyond the visual detection of objects, places and faces, Fraunhofer IDMT technologies allow for the classification of acoustic scenes, detection of audio events, and the annotation of musical attributes such as genre and emotion, all of which can be used for the analysis of TV and radio content:

- Enable advanced search and speedy discovery of content using metadata.
- Improve and harmonize metadata quality across your workflows.
- Quickly find similar material based on sample content or a reference file.
- Provide metadata for advanced personalization and recommendation services.

Content & Provenance Tracking

Fraunhofer IDMT content and provenance tracking innovations combine various matching and machine learning technologies to track the origin, creation and reuse of content within media production workflows, and to provide analytical insights into TV or radio programs:

- Media Asset De-Duplication – detect instances of reuse or partial content overlaps within archives for duplicate detection to optimize the use of storage space.
- Content Tracking – automatic tracking of content use (e.g. pre-production segments vs. broadcasted programs) for rights clearance and accurate cue sheet creation.
- Program Analysis – comparative analysis of program structures and repetitions for optimization and predictive scheduling based on audience and streaming metrics.
- Ad Reporting and Verification – deliver precise reports that measure campaign success by automating the reporting and detection of variations.

Trustworthy AI & Content Verification

Trust is of paramount importance. We develop and offer customized solutions for various media industry challenges related to security, privacy and trust.

To achieve that we combine audiovisual signal analysis and machine learning with IT security, cryptography, data anonymization and statistics:

- Audio Forensics Tools – detect manipulation and fakes in audio and video material, for content moderation, regulatory and legal compliance.
- Privacy Enhanced Technologies (PET) – protect user privacy in systems that deal with personal data, including anonymization and personalization.
- Privacy-Aware Recommendation – build advanced personalization services based on recommender system that build audience trust.
- Trustworthy AI – ensure privacy, security, transparency and accountability for AI solutions.

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Work With Us

Are you looking for content analysis solutions? Do you need support for the introduction, evaluation or implementation of AI-based tools or workflows?

Although we are always working on new R&D projects, our technology is ready for deployment and immediate integration. Our technologies can be licensed as components or services to be used by media companies or integrated into third-party products.

Our software components and technologies are available as platform-independent libraries that can be easily integrated with your existing systems – as native libraries and tools,

Python packages or containerized applications. They are available as API, executable or services running on-premise, off-premise or in combined solutions.

Our consulting services can help you to design and evaluate the AI-driven technologies that best fit your business needs and content, to arrive at bespoke integrations that precisely match your objectives.

Please contact us to discuss your specific questions and challenges. We will be happy to analyze your needs, find possible solutions and provide you with a personalized offer and licensing proposal.

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