AI4Media 7th Plenary Meeting
31 January - 1 February 2023

Florence, Italy (all times are CET – local time)

Day 1: Tuesday, 31 January 2023

09:00 - 09:10	**Welcome**	UNIFI
09:10 - 09:40	Project status overview	CERTH
09:40 - 10:20	WP2 - European AI Vision, Policy and Common Research Agendas - Media AI Observatory status update	KUL UvA
10:20 - 11:15	WP9 - Doctoral Academy and Exchange Programme	AUTH
11:15 - 11:35	**Coffee break**	
11:35 - 12:00	WP1 - Management	CERTH
12:00 - 12:15	WP3 - New Learning Paradigms & Distributed AI (status update)	UNITN
12:15 - 12:30	WP4 - Explainability, Robustness and Privacy in AI (status update)	IBM
12:30 - 12:45	WP5 - Content-centered AI (status update)	UNIFI
12:45 - 13:00	WP6 - Human- and Society-centered AI (status update)	CEA
13:00 - 13:20	WP6 - Policy for content moderation (D6.2)	KUL
13:20 - 14:15	**Lunch break**	
14:15-17:15	Poster/demo session - Posters/demos for WP3,4,5,6 outcomes - Demos of use case demonstrators	All partners

Day 2: Wednesday, 1 February 2023

09:00 - 09:05	**Welcome**	UNIFI
09:05 - 10:25	WP8 - Use Cases & Demonstrators in Media, Society and Politics - First evaluation outcomes, main findings & insights (10 mins per use case)	VRT Use case leaders
10:25 - 10:45	WP8 - Use Cases & Demonstrators in Media, Society and Politics - Update on integration & 2nd release of demonstrators	ATC
10:45 - 11:00	**Coffee break**	
11:00 - 13:15	WP8 and WP3,4,5,6 joint session - Rendezvous between use case leaders and technical partners to discuss new AI functionalities/modules to be integrated in the 2nd release of the demonstrators	All partners
13:15 - 14:05	**Lunch break**	
14:05 - 14:45	WP7 - Integration with AI-on-Demand Platform - Recent developments and sustainability of AIoD platform	FhG-IAIS
14:45 - 15:35	WP10 - Community Outreach and Growth	F6S
15:35 - 16:10	WP11 - Communication & Dissemination	LOBA
16:10 - 16:40	WP11 - Exploitation	ATC
16:40 - 17:00	**Close of meeting**	CERTH

Poster/demo session on Jan. 31st – Summaries for posters & demos

1. Summaries for the presentation of selected works from WPs 3,4,5,6

***To technical partners**: copy the template below and fill in to provide a short summary for every poster/demo you will present. Posters are organised per WP (WP3,4,5,6)*

Title	*Title of work (short and descriptive)*
Partner	*Partner short name (e.g. CERTH)* *Name of presenter(s)*
Type	*Poster/ live demo/ video/ other (you can also add a small description of 2-3 lines)*
Technical description	*Technical description of presented work (5 lines max)* *Also explain how the proposed work can be applied to / integrated with other technical developments in the project (e.g. in the case of WP3 and WP4 algorithms that can be applied to WP5 or WP6 outcomes)*
Relevance to AI4Media use cases	*Short description (5 lines max) explaining how this work relates to AI4Media use cases and what kind of new AI functionalities it can offer that are useful to these use cases* *This is useful for use case partners to read*

a. WP3 - New Learning Paradigms & Distributed AI

Title	**Model Compression through Knowledge Distillation to enable DeepFake Detection on the Edge (#1)**
Partner	CERTH Akis Papadopoulos
Type	Poster and Live Demo (in a smartphone)
Technical description	The poster will present InDistill, a model compression approach that combines knowledge distillation and channel pruning in a unified framework for the transfer of the critical information flow paths from a heavyweight teacher to a lightweight student. Given that the proposed work can lead to more compact models that are based on Convolutional Neural Networks, it could be applied to any outcomes of WP3-WP5 tasks that come in the form of a CNN. This could make their deployment much more efficient and practical in several applications.

Relevance to AI4Media use cases	The proposed work can make it possible to compress several AI models into a size that is sufficiently small to fit in modern smartphones. An example demonstration will be given on the task of detecting GAN-generated images (such as those created by the site thispersondoesnotexist.com) in an Android phone, which is relevant to UC1.

Title	**Uncertainty-driven Source-free Domain Adaptation (#2)**
Partner	UNITN Nicu Sebe
Type	Demo/presentation
Technical description	This work introduces a new perspective: the absence of the source data and the domain shift makes the predictions on the target data unreliable. We propose quantifying the uncertainty in the source model predictions and utilizing it to guide the target adaptation. Depending on the inductive biases of the model, the source model may predict incorrect target pseudo-labels with high confidence, e.g. due to the extrapolation property in ReLU networks. For this, we construct a probabilistic source model by incorporating priors on the network parameters inducing a distribution over the model predictions. Uncertainties are incorporated to identify target data points that do not lie in the source manifold and to down-weight them when maximizing the mutual information on the target data.
Relevance to AI4Media use cases	This is useful for use cases where the source data is not available but yet we still want to do domain adaptation driven by uncertainty.

Title	**AdvisIL - A Class-Incremental Learning Advisor (#3)**
Partner	CEA Adrian Popescu
Type	Poster
Technical description	This poster will present AdvisIL, an approach which simplifies the implementation of incremental learning methods for practitioners. End users provide only generic information about the incremental process that they want to deploy and AdvisIL recommends an appropriate incremental method from a configuration catalog which was precomputed, along with information about the characteristics of the proposed method.
Relevance to AI4Media use cases	AdvisIL facilitates the deployment of incremental learning algorithms for use cases that handle dynamic data, and need to update their AI models in a swift manner.

Title	**A survey of manifold learning and its applications for multimedia (#4)**

Partner	JR Hannes Fassold
Type	Poster
Technical description	Manifold learning is an emerging research domain of machine learning. In this work, we give an introduction into manifold learning and how it is employed for important application fields in multimedia (similarity search, image classification, synthesis & enhancement, video analysis, 3D data processing, nonlinear dimension reduction) and about available open source software frameworks.
Relevance to AI4Media use cases	The survey of manifold learning, together with an analysis of the AI4Media use cases, serves as a starting point for determining in which direction the JR research on manifold learning will go. One direction will likely be regarding image similarity search.

Title	**PandA: Unsupervised Learning of Parts and Appearances in the Feature Maps of GANs (#5)**
Partner	QMUL James Oldfield
Type	Poster
Technical description	PandA proposes a method for learning latent factors for semantic parts and appearances in convolutional image generators. This facilitates local image editing, object removal, and concept localization. The concept localization ability can additionally be of potential use in explainability of generative models, an endeavor of interest to WP4.
Relevance to AI4Media use cases	The way in which this work enables custom content generation and fine-grained image manipulation is of potential interest to UC6.

Title	**How & When to Transfer with Transfer Learning (#6)**
Partner	BSC Adrian Tormos
Type	Poster
Technical description	Transfer learning is the de facto approach in image related AI tasks, as it enables the use of neural networks in situations with limited data and computational resources. This study explores the trade-offs between fine-tuning and feature extraction regarding performance, environmental footprint, human hours and computational requirements.

Relevance to AI4Media use cases	This work highlights how lightweight feature extraction methods are in contrast to fine-tuning, without suffering high performance losses in most cases. This is of special interest in industry cases like media outlets, in which it is common to have limited computational resources and/or data availability.

Title	**Open-ended Evolution for Minecraft Building Generation (#7)**
Partner	University of Malta (UM) Matthew Barthet
Type	Live Demo / Video
Technical description	This demo/video will present DeLeNoX for Minecraft, a Deep QD PCG tool which evolves Minecraft buildings according to an open-ended and intrinsic definition of novelty. To realize this goal we evaluate individuals' novelty in the latent space using a 3D autoencoder, and alternate between phases of exploration (CPPN-NEAT) and transformation (re-training of the autoencoder).
Relevance to AI4Media use cases	This work is on content generation and is applicable for both 2D and 3D games, and is of potential interest to UC5.

Title	**CL^{2}R: Compatible Lifelong Learning Representations (#8)**
Partner	UNIFI Niccolò Biondi and Federico Pernici
Type	Poster
Technical description	We propose a method to mimic natural intelligence for the task of lifelong learning representations that are compatible. We take the perspective of a learning agent that is interested to recognize object instances in an open dynamic universe in a way in which any update to its internal feature representation does not render the features in the gallery unusable for visual search problems. We refer to this task as CL^{2}R as it considers the compatibility learning problem under a lifelong learning scenario. We identify stationarity as the property that the feature representation is required to hold to achieve compatibility. Because of stationarity, the statistical properties of the learned features do not change over time, making them interoperable with previously learned features.
Relevance to AI4Media use cases	Our paper contributes to use case 2 (2A, 2B) and use case 7 as it proposes a training procedure of for the new problem of CL^{2}R in which gallery's features in a visual search systems does not require to be re-computed (re-indexed) when the model is updated in a lifelong learning scenario.

b. WP4 - Explainability, Robustness and Privacy in AI

Title	**Deepfake Detector Attack and Defence Analysis (#9)**
Partner	IBM / CERTH Kieran Fraser
Type	Poster
Technical description	The poster will present work carried out between IBM and CERTH analyzing the Mever DeepFake detection service with respect to its robustness. The work can be integrated within the existing integration in UC1 and can also serve as an example of how adversarial attacks and defense libraries can be used to reinforce the trustworthiness of existing AI4Media components.
Relevance to AI4Media use cases	This work demonstrate how the trustworthiness of a component produced by AI4Media and integrated within an existing AI4Media platform can be evaluated and defended against malicious attacks

Title	**Concept Discovery in Activation Spaces with Singular Value Decomposition (#10)**
Partner	Hes-so Valais Mara Graziani
Type	Poster
Technical description	The poster will present a novel method to discover key features learned in deep representations of convolutional networks. The method can be integrated in the set of toolboxes provided by WP 4. Further possibilities of integration with use cases shall be explored during the workshop session.
Relevance to AI4Media use cases	This method offers a powerful tool to explain convolutional networks and automatically identify relevant features used for classification and regression tasks. These functionalities may be particularly useful for the DeepFake detector in UC1 and for UC3.

Title	**L-CAM: Learning Visual Explanations for DCNN-Based Image Classifiers Using an Attention Mechanism (#11)**
Partner	CERTH Vasileios Mezaris

Type	Poster
Technical description	This poster will present L-CAM, an approach that trains an attention mechanism to learn producing explanations for CNN image classifiers. The trained attention mechanism can then be used to produce visual explanation maps using the feature maps of CNN's last convolutional layer. This proposed approach can be used to explain the classification results of CNN image classification methods that were developed in AI4Media.
Relevance to AI4Media use cases	The proposed approach can facilitate the explanation of CNN image classifier decisions, which is relevant to UC1, UC3 and UC4.

Title	*Placeholder - we will update this table ASAP*
Partner	FhG-IDMT
Type	Poster
Technical description	*Technical description of presented work (5 lines max)* *Also explain how the proposed work can be applied to / integrated with other technical developments in the project (e.g. in the case of WP3 and WP4 algorithms that can be applied to WP5 or WP6 outcomes)*
Relevance to AI4Media use cases	*Short description (5 lines max) explaining how this work relates to AI4Media use cases and what kind of new AI functionalities it can offer that are useful to these use cases* *This is useful for use case partners to read*

Title	**ImageCLEF2023 Benchmarking campaign (#13)**
Partner	UPB Ana-Maria Drăgulinescu
Type	Poster
Technical description	The poster highlights ImageCLEF2023 evaluation campaign, an event launched under the auspices of AI4Media project which proposes to the participants several research tasks for different domains such as social media and Internet and content recommendation.
Relevance to AI4Media use cases	ImageCLEF2023 participants are asked to devise annotation, indexing, and multimodal data classification and retrieval systems which are evaluated during the campaign. ImageCLEF2023 benchmarking activities contribute to the AI4Media project's scope with the following outcomes: - it identifies high-potential implementations and results for content recommendation; - it exploits the benefits of reaching the ImageCLEF community to disseminate AI4Media results; - it increases

	research community awareness on benchmarking activities (involve AI4Media members in future editions);

Title	**GAP: Differentially Private Graph Neural Networks with Aggregation Perturbation (#14)**
Partner	IDIAP Sina Sajadmanesh
Type	Poster
Technical description	The poster will present our recent method for privacy-preserving training and inference with graph neural networks based on the framework of differential privacy. The method protects the privacy of graph data: features, labels, and edges.
Relevance to AI4Media use cases	This work demonstrate how the privacy of a graph-based component produced by AI4Media and integrated within an existing AI4Media platform can be protected with formal guarantees.

Title	**SMACE: A New Method for the Interpretability of Composite Decision Systems(#15)**
Partner	UCA Gianluigi Lopardo, Damien Garreau, Frédéric Precioso, Greger Ottosson
Type	Poster
Technical description	Interpretability is a pressing issue for decision systems. Many post hoc methods have been proposed to explain the predictions of any machine learning model. However, business processes and decision systems are rarely centered around a single, standalone model. These systems combine multiple models that produce key predictions, and then apply decision rules to generate the final decision. To explain such a decision, we present SMACE, Semi-Model-Agnostic Contextual Explainer, a novel interpretability method that combines a geometric approach for decision rules with existing post hoc solutions for machine learning models to generate an intuitive feature ranking tailored to the end user. We show that established model-agnostic approaches produce poor results in this framework.
Relevance to AI4Media use cases	This work proposes a new method for the explainability of decision-making systems, aligned to the T4.3 AI4Media task.

c. WP5 - Content-centered AI

Title	**ALADIN: Image-Text Matching and Retrieval in VISIONE (#16)**
Partner	CNR Nicola Messina, Lucia Vadicamo, Giuseppe Amato, Paolo Bolettieri, Fabio Carrara, Fabrizio Falchi, Claudio Gennaro, Claudio Vairo
Type	Live demo/Poster
Technical description	In this demo we will demonstrate the latest version of the VISIONE video retrieval system (http://visione.isti.cnr.it/). VISIONE has just participated in the latest VBS 2023 competition (https://videobrowsershowdown.org/), where it ranked first in the Visual KIS task, second in the Textual KIS task, and second in the overall leaderboard. This new version of VISIONE leverages on ALADIN, a new cross-modal, text-to-image, retrieval functionality, developed by CNR within the AI4Media project.
Relevance to AI4Media use cases	VISIONE offers powerful methods for video retrieval and browsing, which are particularly useful to UC3

Title	**Unsupervised Domain Adaptation for Video Violence Detection in the Wild (#17)**
Partner	CNR Luca Ciampi
Type	Poster
Technical description	This poster will present an Unsupervised Domain Adaptation (UDA) scheme for Video Violence Detection, a subtask of human action recognition that aims to detect violent behaviors in video clips. UDA aims at mitigating domain shifts between different domains, relying on labeled data in the train (or source) domain and unlabelled data in the test (or target) domain. We will show that our solution can improve the generalization capabilities of the considered models against new scenarios for which labels are absent. To this end, we will show preliminary results from an experimental evaluation performed over the *Bus Violence* dataset, a new collection of videos specific for detecting violent actions in public transport that we gathered on purpose from a moving bus.
Relevance to AI4Media use cases	Relevant to UC3 to identifty videos containing violent scenes in a context of data scarcity

Title	**XAI-SUM: Explaining Video Summarization Based on the Focus of Attention (#18)**
Partner	CERTH Vasileios Mezaris
Type	Poster

Technical description	This poster will present XAI-SUM, an approach for explaining the output of attention-based networks for video summarization. It will explain how the typical analysis pipeline of such networks can be used to define explanation signals, report our findings about the performance of different signals, and show how the inherent attention weights can be used to interpret the video summarization results. The proposed approach can be used to explain the suggestions of attention-based video summarization methods that were developed in AI4Media, such as the unsupervised CA-SUM video summarization network.
Relevance to AI4Media use cases	By increasing the level of understanding about the suggestions of the automated video summarization technology, the proposed approach can facilitate video content production and content automation, which is relevant to UC3.

Title	**Deep Piano Synthesizer (#19)**
Partner	IRCAM Rémi Mignot
Type	Poster
Technical description	This poster will present an update on the *Deep Piano* synthesizer. This piano sound synthesizer is based on the DDSP (Differentiable Digital Signal Processing) approach, with parameters computed by a deep network trained on real piano performance. This update will focus on an explanation of the current limitation of the approach. For future developments, this work can take advantage of GAN and multi-losses approaches from WP3.
Relevance to AI4Media use cases	This work is relevant for Use Cases which deal with music synthesis, which are UC5 and UC6.

Title	***SRAUnet - Super Resolution Atrous Unet for super resolution and restoration of analog videos* (#20)**
Partner	MICC - UNIFI Lorenzo Berlincioni
Type	Poster/Video
Technical description	In this poster and related materials we will present an ongoing work over the issue of real-time video quality enhancement for analog recorded and archived videos, taking into consideration both the super-resolution side of the task and the artifact removal one with particular attention to analog video/VHS related artifacts. We propose an improved architecture wrt to the previous ones purposefully designed to take into account unique artifacts related to analog recordings.

Relevance to AI4Media use cases	This work is relevant for the Use Case 3 : AI in Vision - High Quality Video Production & Content Automation as it deals with restoration and quality improvement of videos under real time constraints.

Title	**Super-resolution benchmarking and detection - Progress in T5.5 (#21)**
Partner	BSC Adrián Tormos
Type	Poster
Technical description	In this poster we will present an update on our progress in our super-resolution (i.e. image/video upscaling via AI) work, in which we are benchmarking super-resolution models and researching the detection of upscaled images with super-resolution. Specifically, we are working with 1080p and 4K images.
Relevance to AI4Media use cases	This work is relevant for Use Case 3, as it entails the management and enhancement of high quality image and video media.

d. WP6 - Human- and Society-centered AI

Title	**A multilingual aligned dataset for target-based sentiment classification (#22)**
Partner	CEA Adrian Popescu
Type	Poster
Technical description	This poster will present ongoing work on a new dataset for multilingual sentiment classification in news, with focus on political ones. The dataset is proposed because, somewhat surprisingly, such resources are scarce for most existing languages, and none of them is aligned across languages. This alignment is important because it enables benchmarking within each language, but also across languages. We notably present results with different configurations of automatic translation as a way to extend sentiment classification to new languages without a need for manual labeling.
Relevance to AI4Media use cases	The dataset is useful for use case partners which need to analyze sentiment in news content in languages other than English. Pre-trained models for languages such as Dutch, German, Spanish and Italian will be provided, along with the dataset.

Title	**Ephemerality metrics for estimating healthiness of online discussions (#23)**

Partner	BSC Dmitry Gnatyshak
Type	Poster
Technical description	The poster will present the ephemerality metrics that show how uniform or clustered is the social media activity (e.g. in terms of number of tweets) in a given time period. It will also showcase examples of twitter discussions for different ephemerality values.
Relevance to AI4Media use cases	The metric is a lightweight way to numerically represent the shape of how social media activity evolves through time. We offer several metric options, that can pick different shapes of activity evolution when used together. The relevant component is currently being integrated with the AI4Media platform.

Title	**Frame analysis of No-vax news in Europe with GPT-3 (#24)**
Partner	Idiap Research Institute David Alonso del Barrio
Type	Poster
Technical description	The poster will present the use of GPT-3 for news headline classification, its performance and possible limitations. We also analyze a subsample of full articles in order to see how these models work with longer articles.
Relevance to AI4Media use cases	This exploratory work on the potential use of generative models for the identification of frames in text may be of interest to partners interested in the automation of news analysis, in this case frame analysis.

Title	**Statistical characterization of local news (#25)**
Partner	Idiap Research Institute Victor Bros
Type	Poster
Technical description	The poster will present the preliminary work on the different characterization methods applied to articles from Swiss local newspapers. We will discuss the results and the future prospects of these leads.
Relevance to AI4Media use cases	This work may be useful for the partners to refine the analysis of the articles according to their scope. It opens the way to taking into account the specificities of local news (production and reception) in the news analysis.

Title	**DeepFake Detection (#26)**

Partner	UPB Cristian Stanciu
Type	Poster
Technical description	The poster highlights some of the conclusions in our ongoing experimental study regarding the deep fake detection state of the art, focusing especially on generalization. It will be divided in a number of categories of improvements that can be added to enhance the performance/ architecture of a deep fake detection algorithm.
Relevance to AI4Media use cases	It is crucial that we know what works best, not only in a closed setting, but also in real-life scenarios. Although many algorithms can provide a good performance, they do not maintain that level of performance when dealing with other datasets. Our experimental study brings us one step closer to using the best deep fake detection methods in the real world.

Title	**3D-Aware Human Synthesis (#27)**
Partner	UNITN Nicu Sebe
Type	Demo/Presentation
Technical description	This work proposes a 3D-aware Semantic-Guided Generative Model (3D-SGAN) for human image synthesis combining a Generative NeRF (GNeRF) with a texture generator (TG): GNeRF learns an implicit 3D representation of the body and outputs a set of 2D semantic segmentation masks while the TG transforms the masks into a real image, adding a realistic texture to the human appearance. Without additional 3D information, the model learns 3D human representations with a photo-realistic, controllable generation
Relevance to AI4Media use cases	Content generation and manipulation could be of relevance in several applications and use cases.

Title	***Fallacious Argumentation in Political Debates* (#28)**
Partner	*UCA-3IA* Serena Villata (presented by Lucile Sassatelli)
Type	*Poster + live demo*

Technical description	First, we present a novel annotated resource of 31 political debates from the U.S. Presidential Campaigns, where we annotated six main categories of fallacious arguments, leading to 1628 annotated fallacious arguments; second, we tackle this novel task of fallacious argument classification and we define a neural architecture based on transformers outperforming state-of-the-art results and standard baselines. Live demo at: https://3ia-demos.inria.fr/disputool/ The work is related to the goals of WP6.
Relevance to AI4Media use cases	*The poster is related to the use cases about online disinformation with a focus on political discussions.*

2. Summaries for the presentation of use case demos

Title	**Truly Media presentation**
Use case	UC1
Partner	ATC/DW Danae Tsabouraki; Birgit Gray
Type	Live demo
Demo description	Walkthrough of the main functionalities of the platform and showcase of existing integrations
Technical components	*Provide a list of bullets of the integrated components that you will demonstrate* ● Deepfake detector for videos (CERTH) ● Image Verification Assistant (CERTH) ● Audio forensics components (FhG-IDMT)
Additional desired functionalities	*Provide a list of bullets presenting what additional/new functionalities you would like to add to your demonstrator in the next releases (note that this is about functionalities that have not been integrated yet/ are not currently under integration)* ● Reverse image searches within a media archive ● Multilingual NLP components for extraction of named entities ● Network analysis components

Title	**Smart News Assistant**
Use case	UC2
Partner	VRT Chaja Libot

Type	Presentation of different demonstrators: Checkbox (live), Video Curator (video), NWSify (live)
Demo description	- Checkbox: a toolbox that makes factchecking tools accessible and understandable for journalists, who are non-expert factcheckers - Video Curator: a tool that suggests video content (from news agencies) based on text input of a news item. In order to automatically generate video output. + first experiments with a synthetic voice. - NWSify: visualizing and monitoring real-time open data for journalists
Technical components	*Provide a list of bullets of the integrated components that you will demonstrate* ● Checkbox: o Image Verification Assistant by CERTH o Deepfake detector by CERTH ● Video Curator: o Blur detection o Interview detection - MTCNN model for face detection o Shot type detection (https://cinescale.github.io/#get-the-model) o Caption generator: VisionEncoderDecoderModel from Huggingface: nlpconnect/vit-gpt2-image-captioning o People detection; Google Cloud VideoIntelligence service o Google shot detection - VideoIntelligence service o Crossencoder: match subclips with text: cross-encoder/ms-marco-MiniLM-L-12-v2
Additional desired functionalities	*Provide a list of bullets presenting what additional/new functionalities you would like to add to your demonstrator in the next releases (note that this is about functionalities that have not been integrated yet/ are not currently under integration)* ● Video Curator: o Better understanding of text to find matching assets o Better metadata — e.g. video annotation o Create synthetic voice ● NWSify: o detect significant change in data ▪ change point detection (prophet) o detect relevant correlations o create data stories

Title	**Multimodal content search, retrieval and browsing**

Use case	UC3
Partner	RAI Maurizio Montagnuolo
Type	Live demo of two tools: Face Management Framework, Concept Book
Demo description	● Face Management Framework: a system for content annotation based on the appearance of TV personalities. ● Concept Book: a unified interface to search multimodal news documents from different sources (e.g. TV newscasts, web articles, etc.) based on semantic information like concepts, entities mentioned in the documents, news categories, dates, etc.
Technical components	*Provide a list of bullets of the integrated components that you will demonstrate* ● Face Management Framework o Face detection, identification and clustering (RAI) ● Concept Book o Speech-to-text, NER, document classification (RAI - not from AI4Media components)
Additional desired functionalities	*Provide a list of bullets presenting what additional/new functionalities you would like to add to your demonstrator in the next releases (note that this is about functionalities that <u>have not been integrated yet/ are not currently under integration</u>)* ● Face Management Framework o Add the ability to recognise speaking people (speaker diarization and identification) o Identify the type of camera shot type for the detected face, e.g., close-up, very close-up, etc. o Recognise facial-related attributes like mustache, hair color, beard, hat, glasses, etc. ● Concept Book o Ability to better organise/visualise the news items returned by a user search, like for example: ▪ Text summarisation ▪ Document clustering (based on sub-topics) ▪ Timeline summarisation ▪ Topic / keyword extraction

Title	**Tracing reuse across a large scale AV archive using Partial Audio Matching**
Use case	UC4
Partner	NISV Philo van Kemenade

Type	Live demo of Partial Audio Matching integration in the CLARIAH Media Suite.
Demo description	This integration enables SSH Researchers to trace how audio segments from a source program have been reused in a set of target programs in the NISV archive.
Technical components	Provide a list of bullets of the integrated components that you will demonstrate ● Audio Fingerprint Extraction (FhG) ● Audio Fingerprint Matching (FhG)
Additional desired functionalities	Provide a list of bullets presenting what additional/new functionalities you would like to add to your demonstrator in the next releases (note that this is about functionalities that have not been integrated yet/ are not currently under integration) ● Storing Partial Audio Matching results as annotations ● Visualising Partial Audio Matching results ● Ability for users to trigger Audio Fingerprint Extraction

Title	**Music Search Engine for Video Games**
Use case	UC5-B
Partner	IRCAM Rémi Mignot
Type	Live demo
Demo description	The current prototype of the demonstrator will be presented. It is a smart search engine of music pieces based on attributes (music genres, emotions) tested to find background music for video games among a catalog.
Technical components	Integrated components that you will be demonstrated ● “ Music Explorer ”
Additional desired functionalities	Additional/new functionalities to integrate: ● Music Similarity (FhG-IDMT), ● Bigger catalog, ● More attributes,

Title	**Music co creation between AI and humans**
Use case	UC6
Partner	Barcelona Supercomputing Center Artur Garcia, Germán Navarro
Type	Video

Demo description	This demo will show the functionalities that allow to design a training session based on audio data, tune this process, and obtain novel music tracks to explore.
Technical components	List of bullets of the integrated components that you will demonstrate ● Music provenance and similarity ● Mini batch trimming
Additional desired functionalities	● Tools that enhance the training of a large dataset. ● Audio processing utilities.

Title	**AI for (Re-)organisation and Content Moderation**
Use case	UC7
Partner	IMG Emil Dimitrov; Alexander Dimitrov; Georgi Kostadinov
Type	Video
Demo description	Video presentation of how Imagga's demonstrator works and how its new features are integrated.
Technical components	*Provide a list of bullets of the integrated components that you will demonstrate* ● Imagga Tagging API ● Imagga Explicit Content Detection (Content Moderation API) ● Imagga Celebrity Recognition (Facial Recognition API) ● Imagga Video Processing
Additional desired functionalities	*Provide a list of bullets presenting what additional/new functionalities you would like to add to your demonstrator in the next releases (note that this is about functionalities that have not been integrated yet/ are not currently under integration)* ● Better support for videos ● Higher range of moderation types ● Integrations with AI4Media components that will add value in the video analysis and content retrieval of the demonstrator

Rendezvous between use case and technical partners on Feb. 1st (11:00-13:15 CET)

***To use case partners**: please get in touch with technical partners, book a timeslot, and add it to the following Table (if you want for e.g. a 30 min meeting, please merge the three relevant cells)*

	UC1	**UC2**	**UC3**	**UC4**	**UC5**	**UC6**	**UC7**
11:00-11:10	ATC + CERTH	VRT + CEA	RAI + FhG-IAIS			BSC+IRCAM	IMG + JR
11:10-11:20							
11:20-11:30	TBD as Hannes from JR will not attend	VRT + FhG-IAIS	RAI + CEA	FhG-IDMT + NISV			IMG + CERTH
11:30-11:40							
11:40-11:50	ATC + BSC	VRT + JR	RAI + FhG-IDMT				
11:50-12:00							
12:00-12:10	ATC + FhG-IDMT		RAI + UNIFI				
12:10-12:20							
12:20-12:30	ATC + CNR	VRT + FhG-IDMT	RAI + BSC				
12:30-12:40							
12:40-12:50	ATC + FhG-IAIS		RAI + CNR	IDIAP + NISV			
12:50-13:00							
13:00-13:10							