



Welcome to the fourth issue of the AI4Media Newsletter!

AI for the Media Industry: A Strategic Research Agenda from the AI4Media consortium

AI4Media focuses on delivering the next generation of core AI advances to serve the key sector of Media, making sure that the European values of ethical and trustworthy AI are embedded in future AI deployments, and reimagining AI as a beneficial enabling technology in the service of Society and Media. The **AI4Media Strategic Research Agenda** is a key contribution towards building a European Network of Excellence focusing on AI for the Media and Society. The objective is twofold: on one hand, it lays out the strategic plan for AI4Media's R&I activities, presenting the main research themes to be tackled by the consortium, explaining the current challenges, the research directions that need to be pursued to address them, the media industry applications, and the potential impact of this research. We hope this will be useful for AI researchers, media practitioners and policymakers. The second objective is to initiate and engage in discussions with the broader community that could result in additional contributions for future versions of this Agenda.

The Agenda also explores how the results of this research can be integrated in seven media-related use cases, informed by emerging market opportunities and urgent media industry challenges and covering a variety of media and societal topics such as disinformation, news research and production, organisation of media archives and content moderation, game design, human-machine artistic co-creation, and social science research. Finally, the AI4Media Strategic Research Agenda also proposes a Media AI Observatory to monitor the legal and technological landscape as well as the impact of media AI while at the same introducing three initiatives (AI Doctoral Academy, Junior Fellows Exchange Program, and AI4Media Open Calls) to advance AI education and skills development and to support entrepreneurship.

- **Machine Learning (ML)**, aiming to address important challenges of current ML techniques, including learning with few data, learning on-the-fly, transfer of knowledge and optimal AI architectures. In addition, research should also focus on distributed AI systems running on heterogeneous devices but also disruptive technologies currently at the laboratory stage such as Quantum-assisted Reinforcement Learning.
 - **Content-centered AI technology**, valuable for the media industry and marketable as end-user services, such as multimedia metadata extraction, summarisation, and clustering, automatic audiovisual content generation and enhancement, linguistic analysis, and media-specific core technologies to improve learning performance.
 - **Human and society-centered AI technology**, to equip citizens and media professionals with a set of tools that can be used to counter the effects of media manipulation and disinformation, enhance the understanding of online debates, support the analysis of perceptions of social media and the effects of online data sharing, and improve local news understanding without being limited by language barriers.
 - **Trustworthy AI techniques** that aim at providing a framework for the development of the technologies mentioned above that guarantees their suitability with respect to democratic and ethical values. Research should focus on issues of robustness against threats and malicious attacks, explainability of AI decisions, fairness and mitigation of bias of AI models, and techniques for privacy-preserving AI.
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Authors: Filareti Tsalakandou and Yiannis Kompatsiaris (CERTH)

You can download and read the AI4Media Strategic Research Agenda on AI for the Media industry

→ Download Here

Our News

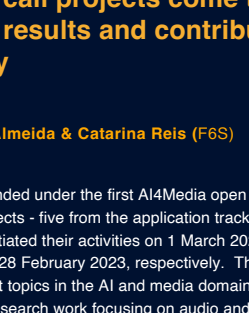


Launch of the AI Media Observatory

Author: Anna Schjøtt Hansen (University of Amsterdam)

In April 2023 the AI4Media consortium launched the beta-version of the European AI Media **Observatory**. The Observatory will serve as a knowledge platform that monitors and curates relevant research on AI in media, provides expert perspectives on the potentials and challenges that AI poses for the media sector and allows stakeholders to easily get in touch with relevant experts in the field via our directory. The Observatory builds on the expertise of more than 30 leading research and industry partners in the field of AI in media.

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New AI4Media white papers released: industry needs for AI uptake in the media

Author: Danae Tsabouraki (ATC)

AI is already here and is pervasive, with many applications in the media sector, from media news research and production, to game development, music generation, and media asset management. Europe is home to numerous research labs and universities that are exploring the vast possibilities and bounds of AI, as well as to a vibrant ecosystem of media companies that want to use AI to improve their products, services, and operations. Bridging the gap between the AI scientists and researchers and the actual end-users of the AI tools has always been a challenge. In AI4Media, we seek to narrow this gap, by publishing a set of white papers as part of AI4Media's effort to align AI research with the industrial needs of media companies, describing the most important challenges and requirements for AI uptake in each use case area within the media industry.

→ read more



First open call projects come to an end with promising results and contributions to the community

Author: Samuel Almeida & Catarina Reis (F6S)

The 10 projects funded under the first AI4Media open call have finalised their activities. The projects – five from the applications track and five from the research track – initiated their activities on 1 March 2022 and ended on 31 October 2022 and 28 February 2023, respectively. The projects, which addressed different topics in the AI and media domains, delivered new applications and research work focusing on audio and music, recommendation systems, edge computation, misinformation, and others.

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The AI4Media Junior Fellows' collection of testimonials has been released

Author: Filareti Tsalakandou (CERTH), Daniel Gatica-Perez (IDIAP), Yiannis Kompatsiaris (CERTH)

AI4Media launched the Junior Fellows Exchange Program in June 2021 to support mobility of young researchers working on AI for the media & society. The program aims to develop new skills, improve diversity, increase visibility, and strengthen the impact of media AI through exchanges of researchers and media professionals across universities, research institutions, and the media industry. Each exchange is expected to produce tangible results while enabling the spread of expertise and skills across Europe.

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Poster & Demo Sessions

Author: Candela Bravo & Joana Martinheira (LOBA)

The 7th AI4Media Plenary Meeting was held at the University of Florence, Italy on January 31st and February 1st 2023. During the event, the AI researchers working in WP 3, 4, 5 and 6 presented their most recent research results through posters and demos, while the media industry partners demonstrated live the demonstrators developed for the seven AI4Media use cases. A debate space was also provided for the partners to exchange ideas and get to know each other's work. Some of the AI techniques and demos presented at the event are presented in short videos available on the project's YouTube channel.

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Check out our latest findings & result

Addressing challenges for the use of AI in media. What ways forward?

Author: Lidia Dutkiewicz, (GITP, KU Leuven)

How to tackle the key challenges for the use of AI applications in the media sector for media companies, researchers and legal and social science scholars? The deliverable D2.4 **Policy Recommendations for the use of AI in Media Sector** is a result of the interdisciplinary research by legal, technical, and societal AI4Media experts, as well as an analysis of the 150 responses from AI researchers and media professionals which were collected as part of the AI4Media survey. It provides the initial policy recommendations to the EU policymakers, addressing these challenges.

→ read more

Will the Digital Services Act (DSA) revolutionise the internet? The present and the future of algorithmic content moderation.

Author: Lidia Dutkiewicz, (GITP, KU Leuven)

What is algorithmic content moderation? What are the technical and socio-political challenges posed by content moderation practices? How will the Digital Services Act (DSA) affect content removals, visibility restrictions and "shadowbans" by the very large online platforms and what new rights will the end-users get? Will the alternative approaches such as community-led moderation on Wikipedia, Discord or Mastodon prevail? And how will the future of content moderation look like in the metaverse? These are just a few questions the Deliverable D2.2 **Report for Policy on Content Moderation** provides the answers to. Read more.

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Great scientific outputs just one click away

The project has produced until now more than 250 scientific publications, more than 50 software, and 14 open data-sets, which are mostly open-access and available one click away to the research community and industry in the field of AI and Media.

Check out this small sample:

Curriculum Learning: A Survey	→ Access
CL2R: Compatible Lifelong Learning Representations	→ Access
Generalized Funnelling: Ensemble Learning and Heterogeneous Document Embeddings for Cross-Lingual Text Classification	→ Access

→ discover more

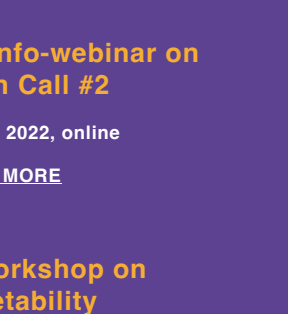
Mixamo - Kinetics dataset	→ Access
COCO, LVIS, Open Images V4 classes mapping	→ Access
CA-SUM pretrained models	→ Access

→ discover more

Class-Incremental Novel Class Discovery	→ Access
FeTrIL: Feature Translation for Exemplar-Free Class-Incremental Learning	→ Access

→ discover more

Our Associate Members - how to join the community



AI4Media's Associate Members currently include 68 organisations from around the world, and growing! Joining our community and benefitting from the collaboration opportunities of the network is simple. We welcome any organisation, EU-funded project or initiative with experience or interest in AI with particular application in the media sectors, and motivation to contribute to research and technological advances in this field. Your application can be submitted via email or online. All applications go through a quick validation process by the AI4Media General Assembly.

→ read more

Submit your application →

Upcoming events

Get your agenda ready for the next events where AI4Media will present its work and progress.

7 June 2023 / Siena, Italy

Third ICT-48 Community Workshop 2023

→ know more

12-15 June 2023 / Thessaloniki, Greece

ACM International Conference on Multimedia Retrieval in 2023 (ACM ICMR 2023)

→ know more

12 June 2023 / Thessaloniki, Greece

2nd ACM International Workshop on Multimedia AI against Disinformation (MAD'23)

→ know more

29 June 2023 / Brussels, Belgium & Online

Meet the Future of AI: Countering Sophisticated & Advanced Disinformation

→ know more

18 September 2023 / Torino, Italy

3rd International Workshop on Learning to Quantify (LQ 2023)

→ know more

20-22 September 2023 / Orleans, France

20th International Conference on Content-based Multimedia Indexing sponsored by AI4Media

→ know more

In case you've missed it

You may have missed it but we'll bring it back to you. Check out AI4Media's past events.

AI4Media supporting the Workshop MAD'22

27 to 30 June 2022, Newark (USA)

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AI4Media supporting the Conference CBMI2022

5 to 8 of September 2022, Bologna (Italy)

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AI4Media supporting the Conference CBMI2022

14 to 16 of September 2022, Graz (Austria)

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AI Mellontology (futurology) Symposium 2022

23 September 2022, Thessaloniki (Greece)

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AI4Media info-webinar on the Open Call #2

20 October 2022, online

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AI4Media 2nd info-webinar on the Open Call #2

15 November 2022, online

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1st Nice Workshop on Interpretability

17 to 18 November 2022, Nice (France)

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AI4Media 1st Junior Fellow Day 2022

28 November 2022, Online

KNOW MORE

e-Symposium on Computational Politics 2023

1 March 2023, Online

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CLAIRE AQUA: ChatGPT and Large Language Models

8 March 2023, Online

KNOW MORE

AI for Audiovisual Archives Current Challenges and Future Paths

23 to 24 March 2023, Online

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