

# 2023 ANNUAL REPORT

Annual activity report of the Initiative for Media Innovation, an academia-industry alliance to foster media innovation

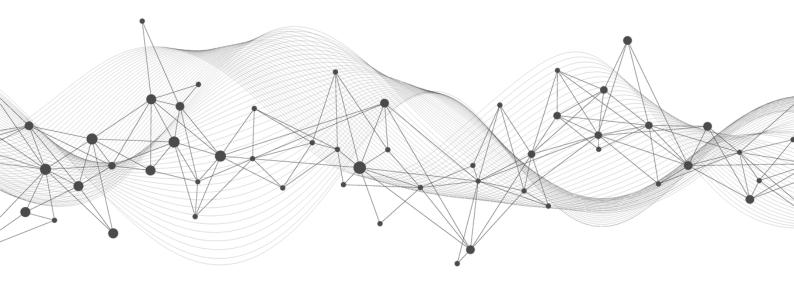


### MESSAGE FROM THE DIRECTOR

Deepfakes, misinformation, and the erosion of trust are increasingly central to the challenges facing our democracies and freedom of expression and information. In a rapidly evolving landscape of AI advances, the central role of our initiative is clear. Facilitating connections between media companies, scientific research, and emerging technologies is crucial.

After six years of activity, with over twenty projects supported and implemented in collaboration with multiple Swiss media partners, 2023 marks a transformative period for IMI. A strategic reorientation and consultations with various media partners led to a reassessment of the Initiative's role and focus in relation to academia, the media sector and society, driven above all by a desire to broaden our reach and impact.

I wish you a pleasant reading, Mounir Krichane, Director of IMI



# ABOUT IMI

IMI is an academia-industry alliance founded and supported by EPFL, SRG SSR and Triangle Azur—a cooperation network between the Universities of Geneva, Lausanne and Neuchâtel. Our goal is to stimulate interdisciplinary research and provide transformative solutions for media and society in the fields of journalism, digital trust, AI and data science.

#### **KEY TARGET AUDIENCES**

Our initiative is mainly active in the French-speaking part of Switzerland, but also nationally and in Europe, where it serves 3 main audiences: researchers, media professionals and the general public.





# SERVICES AND SUPPORT FOR OUR KEY AUDIENCES



#### RESEARCHERS AND MEDIA PROFESSIONALS

- Foresight on key innovation themes and societal issues related to the evolution of media and technology.
- Targeted matchmaking workshops to align media needs with scientific expertise.
- Support through the various stages of a project, from the initial development to the implementation and the pursuit of funding opportunities.
- For researchers, promotion of research findings through communication support.
- For media professionals, training on digital trust, AI, data science, and journalism.

#### **GENERAL PUBLIC**

- Commitment to diverse, high-quality and trustworthy journalism.
- Support for the development and digital evolution of the Swiss media landscape.
- Media and digital literacy, such as raising awareness about the spread of fake news and the manipulation of public opinion.

## KEY FACTS & FIGURES

### **PROJECTS OVERVIEW**

3 new research-oriented projects started and 3 long-term projects (24+ months) completed.

A new thematic call with 2 projects selected for funding in 2024.

Start of a 36-month SNSF-funded project.

### EVENTS & VISITS

5 public events with a total of about 330 participants.

5 site visits organized at EPFL for external partners and 3 visits in Europe and South Korea.

6 speaking engagements by the IMI Director.





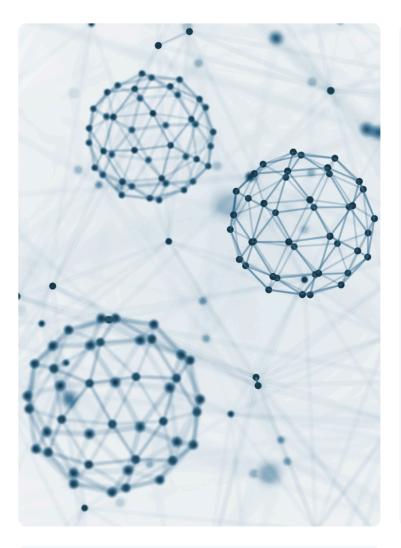
#### TRAINING FOR MEDIA

Creation of a training course for media professionals on digital trust, AI, data science and journalism, starting in 2024 with the support of the EPFL Extension School.

#### **OTHER HIGHLIGHTS**

Around CHF 430,000 invested by IMI in collaborative projects.

33 academic, media and industry experts and students supported by our projects.



# **DEMOSPACES**

#### STIMULATING CONTENT DISCOVERY TO IMPROVE DEMOCRATIC INFORMATION SPACES

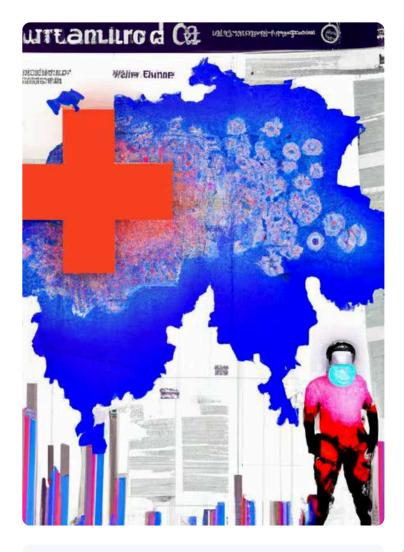
This project addresses media fragmentation by encouraging news consumers to explore content beyond their usual interests, thus fostering a shared information space that is crucial for democracy. In collaboration with RTS, researchers at HES-SO Valais-Wallis are using graph theory to analyze news consumer communities, focusing on IPTC Media Topics and User Needs. Together with researchers from UZH, the project also explores the ethics of "nudging" users to different content. The ultimate goal is to develop a personalized news recommendation system to broaden users' perspectives.

### NEW PROJECT METAVERSE & WEB3

### WHAT PERSPECTIVES FOR THE MEDIA?

This study, conducted by researchers at UniNE, explores how traditional media companies in Switzerland and abroad are dealing with virtual worlds and blockchainbased applications such as NFTs, while highlighting the challenges and potential for research and development in this field. The report, published in 2023, is based on 80 initiatives and interviews with 8 researchers, experts and media practitioners.





# NEW PROJECT

#### LEVERAGING DATA VISUALIZATION AND NARRATIVES DURING HEALTH CRISES

This project aims to understand how data are produced and used in narratives (particularly by journalists) during a pandemic and how they are perceived by the public by identifying how trust in the media, data literacy levels and pre-existing beliefs shape the meaning attached to them. Led by researchers at UniNE and supported by the SNSF under NRP 80, this project brings together media companies, public administrations and journalism schools to identify key factors that influence crisis management and prepare society for future pandemics.

### NEW PROJECT B-NEWS

#### OPTIMIZING BILINGUAL NEWS REPUBLISHING WITH PREDICTIVE ANALYTICS

This project, led by researchers at HES-SO Valais-Wallis in partnership with Blick Suisse romande, aims to develop an AI-driven predictive for bilingual system news republishing in Switzerland. Ultimately, the system will provide a real-time dashboard to help journalists select and adapt articles for publication across regions, using analytics such as audience metrics and social media trends to ensure relevance. This innovation is expected to enable publishers to produce compelling, audience-focused content while maintaining a competitive edge.





## RESULTS OBTAINED

**KEY METRICS** 

NEW PROJECTS

6

INVESTED IN INNOVATION

430K

**33** PEOPLE SUPPORTED

In its aim to build bridges between research, innovation and its many partners in the media sector, one of IMI's key areas of focus is the initiation and support of multistakeholder projects. This was reflected in the past year, which saw the launch of new projects and the completion of others. We also run a number of parallel initiatives to achieve success with our various target audiences.

### KEY ACTIONS TO STRENGTHEN OUR COMMUNITY

- Building relationships with additional academic and media partners
- Co-funding projects through national and international grants
- Organizing matchmaking workshops
- Providing training for media professionals in collaboration with academics
- Hosting events to raise awareness of key issues and opportunities

#### SUCCESS INDICATORS

For media partners

• Number of prototypes from collaborative projects being tested or deployed

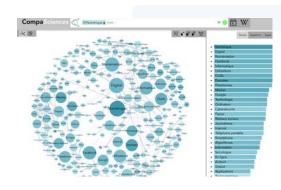
For academic partners

• Number of scientific publications from collaborative projects

For the general public

• Number of outreach events held

### PROTOTYPES FOR MEDIA PARTNERS



### **COMPASCIENCES 2.0**

CompaSciences is an innovative web platform for semantic, computational and qualitative analysis of media content, developed by researchers at UNIL to help journalists navigate the constant flow of information they face every day and identify relevant scientific experts for their stories.

CompaSciences platform (login required)



### AUTOMATIC LABELING OF VISUAL DATA

In this project, researchers at EPFL developed new methods to automatically extract detailed metadata from images and videos, including objects, human actions, and their relationships. This real-time analysis can greatly improve journalistic reporting and benefit content recommendation and retrieval systems.

Movements demo

### PASSAGE

This project, led by researchers at UNIGE in collaboration with recapp IT and SRF, developed an automatic postediting system to improve the quality of automatic German subtitling of Swiss German TV programs.

#### PASSAGE API demo

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ASSAGE API DEMO

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# 2023 EVENTS



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#### CONVERGING METAVERSES & AI IN THE MEDIA SPACE September 5, 2023

In collaboration with



👉 swissnex 🔥 CSLab





**AI-DRIVEN SYNTHETIC REALITIES AND** TRUST: IMPLICATIONS FOR THE MEDIA AND OUR SOCIETY July 12, 2023

In collaboration with



Center for **Digital Trust** 



SCIENCE-MEDIA DIALOGUE ON CLIMATE AND BIODIVERSITY June 8, 2023

In collaboration with

clim⇔act **PR** 

Center for

Intelligent Systems



IMI ANNUAL EVENT May 16, 2023

Preceded by a matchmaking workshop



TECHNOLOGY OR MEDIA: WHO WILL SAVE QUALITY INFORMATION? - SACM ANNUAL **CONFERENCE 2023** April 21, 2023

In collaboration with

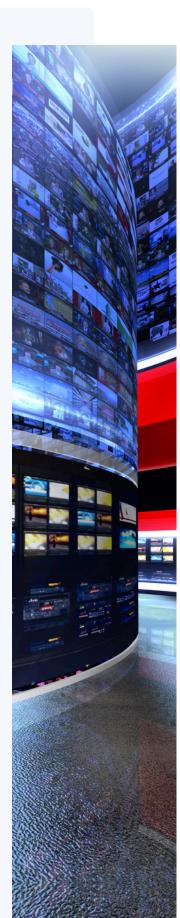


Center for **Digital Trust** 

### SCIENTIFIC PUBLICATIONS

- G. Adaimi, S. Kreiss and A. Alahi. "Traffic perception from aerial images using butterfly fields". Transportation Research Part C: Emerging Technologies, Volume 153, p. 104181, 2023. [link]
- G. Adaimi, D. Mizrahi and A. Alahi. "Composite Relationship Fields with Transformers for Scene Graph Generation". 2023 IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), Waikoloa, HI, USA, pp. 52-64, 2023. [link]
- J.-G. Piguet. « Nudges, désinformation et autonomie citoyenne. Une critique de Sunstein ». Éthique publique, vol. 24, n° 2 | 2022, mis en ligne le 23 janvier 2023. [lien]
- J. Gerlach, P. Bouillon, S. Rodríguez Vázquez, J. Mutal and M. Starlander. "Evaluating a Multilingual Pre-trained Model for the Automatic Standard German captioning of Swiss German TV". In Proceedings of the 8th edition of the Swiss Text Analytics Conference, pp. 14-22, Neuchâtel, Switzerland. Association for Computational Linguistics, 2023. [link]
- G. Manzo, Y. Pannatier, G. Autès, M. De Lucia, J.-G. Piguet and J.-P. Calbimonte. "Serendipity and diversity boosting for personalized streaming media recommendation". In Proceedings of the 13th Italian Information Retrieval Workshop (IIR). Pisa, Italy, June 8-9, 2023, pp. 30-40. CEUR-WS, 2023. [link]
- L. Amigo et N. Pignard-Cheynel. « Métavers et web3. Quelles perspectives pour les médias ? ». Université de Neuchâtel, 2023. [lien]
- J. Mutal, P. Bouillon, J. Gerlach and M. Starlander. "Improving Standard German Captioning of Spoken Swiss German: Evaluating Multilingual Pre-trained Models". In Proceedings of Machine Translation Summit XIX, Vol. 2: Users Track, pp. 65-76, Macau SAR, China. Asia-Pacific Association for Machine Translation, 2023. [link]
- S. Jones, Y. Rochat et P. Ronga. « Concevoir un témoignage vidéoludique en temps de pandémie : le développement de Quatre apparts et un confinement ». Kinephanos, 9(1), pp. 145-168, 2023. [lien]
- V. Carlino et N. Pignard-Cheynel. « Saisir les pratiques de production et de réception des « fake news » en contexte numérique ». Les Enjeux de l'information et de la communication, vol. 23/1a, no. S1, pp. 5-14, 2023. [lien]

### 2024-2025 Objectives



### KEY INNOVATION THEMES

Position ourselves on key innovation themes by setting up a joint foresight process with our partners.

### **2** EXTERNAL FUNDING

Encourage the development of new partnerships, in Switzerland and abroad, that involve external funding.

3

### **REGIONAL MEDIA & UNIVERSITIES**

Receive project proposals that involve new partners, primarily at the local and regional level, through matchmaking workshops.

4

5

#### **NEW PROJECTS & PROTOTYPES**

Support collaborative projects with international partners and deploy project prototypes in affiliated media outlets.

### OUTREACH

Increase public awareness of a small selection of our projects by strengthening our communications efforts.

# CONTACT

- www.media-initiative.ch
- info@media-initiative.ch
- +41 21 693 91 27
- c/o EPFL AVP CP MEDIA BAC 101 (Château de Bassenges) Station 5 CH-1015 Lausanne