

XAIface

Measuring and Improving Explainability for AI-based Face Recognition

Dissemination report (V2)

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Short abstract

This document reports the activities relative to WP6, T6.2 “Dissemination activities.” The current version reports the Dissemination Plan as well as the list of publications and dissemination events in which the results of XAlface were presented. Future versions of the document, from month 30 onwards, will also report the exploitation plan and exploitation activities and its title will be changed to “Dissemination and Exploitation Report”.

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Definitions

Dissemination is the public disclosure of the results of the project in any medium. It is a process of promotion and awareness-raising right from the beginning of a project. It makes research results known to various stakeholder groups (like research peers, industry and other commercial actors, professional organisations, policymakers) in a targeted way, to enable them to use the results in their own work.

Exploitation is the use of the results during and after the project's implementation. It can be for commercial purposes but also for improving policies, and for tackling economic and societal problems.

1. Introduction

In this document, we provide the first version of the “Dissemination plan” of the XAlface project.

Dissemination and exploitation actions are aimed to maximise the impact of the research. The public disclosure of the results by any appropriate means as well as utilisation of results in further research activities other than those covered by the action are the essential elements of good research practice.

Therefore, in this report we propose a list of possible targets to which the research outcomes should be disseminated with a list of actions which can be performed in order to reach such targets. This report considers possible methods and targets for dissemination.

The responsibility for proper implementation of the plans lies with EURECOM. However, this does not exclude responsibility of each XAlface partner.

The dissemination plan reflects project progress and outputs:

- Identifies areas and stakeholders that could make use of results;
- Describes concrete and well-timed measures for dissemination of all key results throughout project lifetime and after project end;
- Uses effective channels and platforms for all groups of potential users with long-term perspective;
- Facilitates and supports each of the impacts aimed at in the work plan.

Dissemination activities are going to be performed during the whole project lifetime.

The report will be updated at M24 and the Dissemination and exploitation plan will be released at M30 and updated at M36.

2. Dissemination plan

Dissemination is achieved through different activities. The activities completed so far are described in the following.

2.1. XAlface project logo

The logo includes the name of the project (XAlface) and intends to capture the attention of the audience. The logo will be used for any (internal or external) deliverable, report and dissemination tool. The logo is presented in Fig. 1.

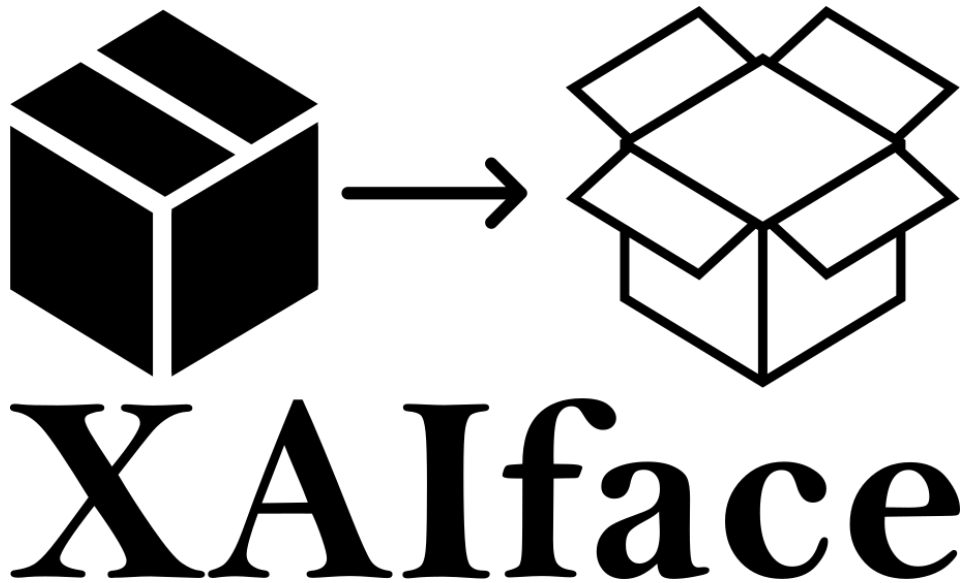


Figure 1: XAIface project logo

2.2. The internet

2.2.1. Project website

The XAIface website (www.xaiface.eurecom.fr) is designed to be the major source of information about the project for stakeholders. It is updated continuously and available to all stakeholders, in any country, at any time. A preview of the website is presented in Fig. 2. The website is implemented with a responsive web design (RWD) that creates dynamic changes to the appearance of a website, depending on the screen size and orientation of the device being used to view it. RWD is one approach to the problem of designing for the multitude of devices available to customers, ranging from tiny phones to huge desktop monitors.

XAIface

Measuring and Improving Explainability for AI-based Face Recognition.

Face recognition has become a key technology in our society, frequently used in multiple applications, while creating an impact in terms of privacy. As face recognition solutions based on machine learning are becoming popular it is critical to fully understand and explain how these technologies work in order to make them more effective and accepted by society.

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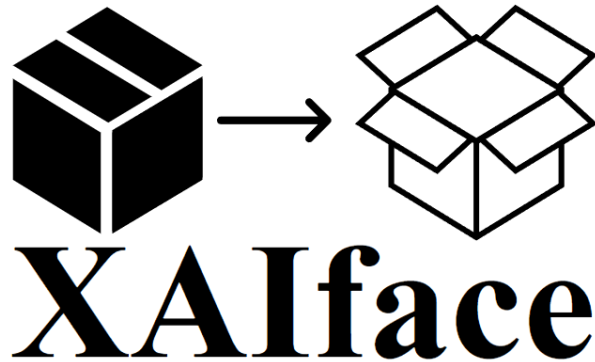



Figure 2: XAIface project website preview

2.2.2. Video

A dissemination video has been created (D6.4 Explanatory Videos) to present XAIface. The video is published on the project social media platforms as well as on the partners websites and social media.

For example, the video is published on EURECOM's YouTube channel:

 [EURECOM - XAIface](#)

The XAIface video was submitted to the video contest organised by CHIST-ERA for the annual meeting in 2023:

<https://www.chistera.eu/projects-seminar/video-contest/2023>

2.2.3. Social media

Social media is prevalent in everyday life: in social settings; corporate environments; and within the scholarly community. By using social media effectively, we want to increase the impact of our work and positively influence stakeholders, at a relatively low cost compared to face to face contact.

Social media channels which will be exploited for XAIface disseminations activities are: Twitter and LinkedIn.

Twitter: <https://twitter.com/chisteraxaiface>

LinkedIn: [linkedin.com/in/chistera-xaiface-6a3478219](https://www.linkedin.com/in/chistera-xaiface-6a3478219)

2.3. Publications

Publications are a broad range of reviewed and non-reviewed documents. This category includes policy reports, academic journal articles, conference articles, magazines, press releases, blog articles and newsletters.

Publications are aimed to reach different types of stakeholders. All publications should follow the rule of open access publishing. The project partners will ensure all the published works will be publicly available by targeting journals and conferences providing free-online access to the articles and by providing open access to the author versions on the partners' websites as well as on publicly accessible article repositories such as arXiv.org and OpenAIRE.

A number of print resources will be developed to be used in project promotion, such as:

- I. Publication of learned articles and other contributions in leading scientific journals;
- II. Publication of articles, press releases and contributions to national and Europe-wide newsletters, technical and industry bulletins and journals;
- III. Project brochure and poster: at the beginning of the project there will be a summary of the project including the objectives, the consortium and the expected results. This summary will be printed in a brochure to hand out in meetings and conferences. A larger version will also be produced as a poster in such a way that we will be able to prominently display it in events where project partners will be exhibiting;
- IV. Project presentation: to complement the brochure, a common project presentation will be developed at the beginning of the project. This presentation will be updated periodically, taking into consideration the advances of the project. It will be disseminated in English to all consortium partners for international use. For national/local use, the presentation might be translated in the partner's own language; this depends upon the partner requirements.

The proposed measures will initially help to achieve the anticipated impact through parallel activities designed to passively create awareness and raise the profile of the project online and in reality.

We identified a list of recognized scientific peer-review journals and conferences relevant for the XAIface project. A sample list of journals, magazines, and conferences that are targeted is provided in Table 1.

All partners are responsible and actively involved in publishing. Publications refer to the project by the following acknowledgement:

(Each partner has to rewrite the sentence in order to replace ANR with their own national agency.)

"This work has been partially supported by the European CHIST-ERA program via the French National Research Agency (ANR) within the XAIface project (grant agreement CHIST-ERA-19-XAI-011)."

The list of publications is presented publicly (together with copies of articles, where relevant) at the project website. The list of articles published so far in XAIface is given in Table 2.

Table 1: List of targeted journals (JOUR), magazines (MAG), and conferences (CONF)

Name	Type	Topic
ACM Multimedia	CONF	Multimedia
ACM ICMR	CONF	Multimedia Retrieval
ACM Multimedia Systems	CONF	Multimedia Systems
IEEE ICME	CONF	Multimedia & Expo
MMM	CONF	MultiMedia Modeling
IEEE CVPR	CONF	Computer Vision and Pattern Recognition
ECCV/ICCV	CONF	Computer Vision
ICPR	CONF	Pattern Recognition
ACM SIGGRAPH	CONF	Computer Graphics and Interactive Techniques
CVMP	CONF	Visual Media Production
IEEE ICIP	CONF	Image Processing
NeurIPS	CONF	Neural Information Processing Systems
CPDP	CONF	Computers, Privacy and Data Protection conference
WACV	CONF	Computer Vision
BTAS	CONF	Biometrics: Theory Applications and Systems
ICIAP	CONF	Image Analysis and Processing
ICB	CONF	Biometrics
Elsevier Pattern Recognition	JOUR	Pattern recognition, Biometrics
Elsevier Pattern Recognition Letters	JOUR	Pattern recognition, Biometrics
IEEE Transactions on Multimedia	JOUR	Multimedia
IEEE Transactions on Circuits and Systems for Video Technology	JOUR	Circuits and Systems for Video Technology
Springer MTAP	JOUR	Multimedia Tools and Applications
ACM TOMM	JOUR	Multimedia Computing, Communications, and Applications

International Journal of Computer Vision	JOUR	Computer Vision
IEEE Transactions on Image Processing	JOUR	Image Processing
IEEE Transactions on Multimedia, Computer Law & Security Review	JOUR	Law & Security
IEEE Transactions on Pattern Analysis and Machine Intelligence	JOUR	Pattern Analysis and Machine Intelligence
IEEE Communications Magazine	MAG	Technology, Systems, Services, Market Trends, Development Methods, Regulatory and Policy Issues, and Significant Global Events

Table 2: List of published articles

Involved partners	Authors	Title	Conference/Journal (specify)	DOI
EURECOM	Tanmay CHAKRABORTY Utkarsh TREHAN Khawla MALLAT Jean-Luc DUGELAY	Generalizing Adversarial Explanations with Grad-CAM	CVPR workshops	10.1109/CVPRW56347.2022.00031
EURECOM	Nelida MIRABET-HERRANZ Chiara GALDI Jean-Luc DUGELAY	Impact of Digital Face Beautification on Biometrics	10th European Workshop on Visual Information Processing (EUVIP)	10.1109/EUVIP53989.2022.9922802
EURECOM	Nelida MIRABET-HERRANZ Khawla MALLAT Jean-Luc DUGELAY	New Insights on weight estimation from face images	2023 IEEE 17th International Conference on Automatic Face and Gesture Recognition (FG)	10.1109/FG57933.2023.10042568
JRS	Martin Winter Werner Bailer Georg Thallinger	Demystifying Face-Recognition with Locally Interpretable Boosted Features (LIBF)	IEEE 10th European Workshop on Visual Information Processing (EUVIP)	10.1109/EUVIP53989.2022.9922905
EPFL	Yuhang Lu Luca Barras Touradj Ebrahimi	A Novel Framework for Assessment of Deep Face	IEEE 10th European Workshop on Visual Information Processing (EUVIP)	10.1109/EUVIP53989.2022.9922840

		Recognition Systems in Realistic Conditions		
EPFL	Yuhang Lu Touradj Ebrahimi	A Novel Assessment Framework for Learning-based Deepfake Detectors in Realistic Conditions	Applications of Digital Image Processing XLV	10.1117/12.2636683
EPFL	Yuhang Lu Touradj Ebrahimi	Identity-Preserving Knowledge Distillation for Low-resolution Face Recognition	(Submitted)	-
EPFL	Yuhang Lu Touradj Ebrahimi	Explanation of Face Recognition via Saliency Maps	(Submitted)	-
EPFL	Yuhang Lu Touradj Ebrahimi	Impact of Video Processing Operations in Deepfake Detection	(Submitted)	-
EPFL	Yuhang Lu Touradj Ebrahimi	Assessment Framework for Deepfake Detection in Real-world Situations	(Submitted)	-
JRS	Helmut Neuschmied Martin Winter	Explainable Face Verification for Film and Video Archive Documentation	(Submitted / under review)	-
IT	Naima Bousnina Joao Ascenso Paulo L Correia Fernando Pereira	Impact of Conventional and AI-based Image Coding on AI-based Face Recognition Performance	IEEE 10th European Workshop on Visual Information Processing (EUVIP)	10.1109/EUVIP53989.2022.9922751

ALL	Chiara Galdi, Paulo L. Correia, Yuhang Lu, Jonas Pfister, Martin Winter	XAlface: Measuring and Improving Explainability for AI-based Face Recognition	IEEE 10th European Workshop on Visual Information Processing (EUVIP)	-
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2.4. Organisation and participation to dissemination events

In addition to the required participation in conferences for the presentation of an accepted paper, the project partners undertook to organise or participate in other events to disseminate the results of the XAlface project. Table 3 below lists such events and specifies the role of the XAlface consortium in them, as organiser or participant only.

Table 3: Dissemination events

Involved partners	Consortium role	Event	Location	Date
EURECOM , JRS	Participant	CHIST-ERA Projects Seminar 2021	On-line	April, 12 - 14, 2021
EURECOM	Participant	CHIST-ERA Projects Seminar 2022	On-line	28 - 30 March, 2022
ALL	Participant	Project Dissemination Session at EUVIP 2022	Lisbon, Portugal	September 12, 2022
IT, EURECOM	Organiser	Special Session on Biometric Recognition Explainability at EUVIP 2022	Lisbon, Portugal	September 13, 2022
JRS	Participant	CHIST-ERA Projects Seminar 2023	Bratislava, Slovakia	April 4 and 5, 2023
JRS, EURECOM	Organiser	Special Session on Explainability in Multimedia Analysis (ExMA) at CBMI 2023	Orleans, France	September 20 - 22, 2023