



XAIface

Measuring and Improving Explainability for AI-based Face Recognition

Quality control and risk register

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Acronym of the project: XAlface

Title of the project: Measuring and Improving Explainability for AI-based Face Recognition.

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Short abstract

This document reports the activities relative to WP1, T1.2 “Quality control and risk assessment.” In this current version, the document reports the quality control actions and the risk register. The risk register extends the risks individuated in the project proposal.

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1. Introduction

The objective of Work Package 1 is to ensure the project is managed in an efficient way, to be responsible for the financial and administrative management, to maintain the necessary infrastructure (IT, document and data handling), to perform risk management, to manage communication within the project and with the Commission, to resolve conflicts, and to carry out the strategic and executive management of the project as a whole.

In this document, we report the activities relative to Task 1.2 “Quality control and risk assessment”.

2. Quality control

As far as quality control activities in XAlface are concerned, the following elements have been set up for the time being:

- A **mailing list** was set up to keep project partners up-to-date on project deadlines, progress, results and events;
- A copy of the **Gantt chart** was distributed to all partners: this will ensure that documents are prepared on time and their quality is improved as a result;
- The **list of deliverables**, with deadlines and responsible institution for each deliverable, was distributed to the project partners: this also will ensure that documents are prepared on time and their quality is improved as a result;
- A **template** for drafting project documents has been created: this will ensure that the documents are all in the same format and contain all important information;
- The **logos** of the project partners and other useful **images** for documents etc. are made available to project partners in high quality on the XAlface’s *Google Drive*: this ensures that the quality of the visual content of the documents is high;
- The **slides** of the presentations made during the project are shared with the project partners on XAlface’s *Google Drive*: this will ensure that all partners have access to the information they need;
- The text to be included in the **Acknowledgement** section of the scientific articles produced during the project has been defined and shared via *Google Drive*: this will ensure that the project and its funding will be mentioned correctly by all partners.
- A **slack** channel has been created in order to host technical discussions and create subgroups for consortium collaboration.
- **Google Drive folders** have been created for storing deliverable versions ready for submission.

3. Risk management

The project Risk Register that was originally specified at the project proposal stage is regularly reviewed. New risks and mitigation measures are added to the Risk Register (section 3.1), including likelihood (probability of occurrence) and impact (estimate of their severity of impact on time, cost and performance provided), as well as detailed corrective/mitigation measures.

3.1 Risk Register

The risk register below reports project risks classified according to different categories: Technological risks, implementation risks, integration risks, cooperation risks, management risks, exploitation risks, data protection risks, standards compliance risks.

For each risk, identified by a unique ID number, the following is reported:

- description of the risk;
- WPs involved, which work packages are potentially impacted by the occurrence of this risk?;
- Proposed risk-mitigation measures;
- Probability of the problem occurring;
- Impact on the project of the problem should it occur.

Legend:

L	low probability / low impact
M	medium probability / medium impact
H	high probability / high impact

ID	Description of risk	WPs involved	Proposed risk-mitigation measures	Probability	Impact
1. Technological risk					
1.1	Not enough relevant data	3	Generate artificial face images to complement existing datasets	M	H
1.2	Results of assessment not convincing	5	Report the findings anyway and focus on the more convincing achieved results	L	L
1.3	Results too specific to face recognition	4, 5	Provide a set of protocols and metrics that can be equally applied to other fields	M	L
1.4	Some of the influencing factors cannot be fully explainable	4, 5	Factors that were not initially planned could be included as well as using alternative machine-learning models (notably generative models) that may be more easily explainable.	H	M
1.5	Privacy, ethical and legal requirements not sufficiently taken into account in the design.	3 + all tech. WPs	Legal expert UNIVIE is a partner in the consortium and will be in close contact with the technical teams. L-E-P issues will be added as a permanent topic on the agenda of the Project Board.	H	M
1.6	Technical problems during component/module	5,6	The system architecture will be designed with maximum flexibility to simplify the integration	H	M

	development. The various partners could develop processing modules quite independently, without a detailed discussion about their functionality.		of all modules. Furthermore, all partners agree to use standard protocols, open hardware or platform independent programming languages in their development. The coordinator experience should guarantee coherence and finalise the effort of all of the partners to reach the project objectives.		
2. Implementation risk					
2.1	Evolution of privacy legislation during the project	3 + all tech. WPs	UNIVIE will provide the project with the ability of analysing the possible evolution of privacy legislation and its application practice, as well as adopting the necessary corrective measures	H	H
3. Integration risk					
3.1	Delays in component development may lead to delays in system integration.	4, 5	Continuous monitoring of project progress in WP4 and WP5 will be made to track development, determine any potential delays and enable rapid adaptation.	H	H
4. Cooperation risk					
4.1	Conflicting goals within consortium, e.g., between research interests and commercial interests.	1	At all stages of the concept development, all partners will be fully briefed and will have the opportunity to influence the solutions. Moreover, many of the work packages will be carried out in parallel. This will ensure all views are considered and design decisions are communicated amongst the consortium.	L	L
4.2	Poor quality of deliverables and/or delay in meeting deadlines.	1	Project progress will be assessed at frequent intervals to predict possible delays and act accordingly. Internal management reports will assist in monitoring progress and aid timely identification of risks or issues in time to deploy corrective solutions.	H	L
5. Management risk					
5.1	Management, communication and cooperation problems.	1	Several of the XAlface partners have a track record of working together. A collaborative project atmosphere will be facilitated by frequent consortium communication, including technical meetings, progress meetings, teleconferences, and emails.	M	M
5.2	Project consistency issues, e.g. independencies and (inconsistent) timing of activities (e.g. deliverables in relation to work plan, critical project path) that prevent the project running in a streamlined manner.	1	The project execution will be monitored closely (including reviews at regular consortium project meetings) and corrective actions will be taken where necessary to ensure the project runs smoothly.	L	M
5.3	Poor quality of (critical) deliverables, deliverables delivered late and/or milestones are missed.	1	The progress of the project will be assessed at frequent intervals to predict possible delays and act accordingly. Internal management reports will assist in monitoring progress and aid the timely identification of risks/issues in time to deploy corrective solutions.	M	M
6. Exploitation risk					
6.1	The developed solutions are too specific to the defined	4, 5	To ensure that the capability for knowledge transfer is available the development of the	L	L

	scenarios (and cannot be generalized)		solution will be frequently analysed to ensure the components and algorithms are abstracted to a sufficient level.		
6.2	The final solution is incompatible with the current legal framework	3	Inform policy developers of XAiface activities and indicate any necessary changes that are needed.	L	M
7. Data protection risk					
7.1	Non-compliance with GDPR	All	GDPR has been incorporated into the Data Management Plan; adherence to DMP is monitored at Project Board Meetings	L	H
8. Standards compliance risk					
8.1	There is a risk that XAiface activities are out of step with current and emerging best practices or developments in this area. Specifically, bias measuring solutions being explored by the project are still fairly novel thus not necessarily addressed by existing standards.	All	The project will perform an extensive review of existing and developing standards and best practice. By reviewing existing standards as well as monitoring developments and engaging at forums such as the SC37 biometrics standards committee and the SC42 artificial intelligence standards committee we ensure, that the findings from XAiface are incorporated into developing standards and are able to highlight gaps or areas where there is a need for amendment or revision to existing standards.	M	M