A European approach to Artificial Intelligence

The European Tech Alliance (EUTA) represents leading European tech scale-ups that were successfully built in Europe. We are the sole organisation that represents home-grown European tech companies from across the whole industry. Therefore, we demonstrate the variety of European tech voices and business models, ranging from digital music services to big data search, e-commerce platforms, mobile games, carpooling, and file sharing.

The EUTA would like to commend the initial work of the European Commission's High-Level Expert Group on Artificial Intelligence (AI HLEG). The draft guidelines showcase a human-centric focus from the group's experts, as well as a welcome practical approach to move this debate forward. The EUTA supports the EU's ambition to be deliberate in creating a unique approach to AI based on EU norms and values. Such an approach is a necessary stepping stone as the AI discipline is progressively building value in all sectors of human activity by using technologies that can replace human cognition to some extent. Concerns regarding how one can trust AI are natural, and need be broken down by imagining and implementing a principle-based AI governance model.
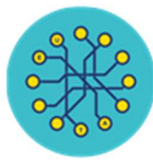
In the ever-pressing global AI race, various regions are investing to be the 'first' to reach the finish line. However, we do not believe that being 'first' necessarily means being a leader, and we recognise that a European approach that prioritises responsible and trustworthy AI and which responds to citizens' needs gives us a greater chance of long term success.

While the AI HLEG draft has been specifically tasked with the mission to identify a set of ethics guidelines, we must not forget the context in which we look to progress. On a macro level, EU investment in AI research and development severely lags behind the US and China.

Moving forward, we need to ensure that we maintain our future framework of values whilst not risking the opportunity to become globally competitive, using the ability to innovate and experiment with large datasets. We appreciate the risk analysis that the authors of the draft report have recognised and touched upon in their work. The field of AI is developing at a rapid pace and over-regulation will chill its development. Future policies in the field should take account of the intricacies of each industrial sector and the likelihood of the adverse consequences of over-prescriptive expectations. For policies to promote AI that is truly European, they must respond to people's needs. European tech firms are amongst those who have, and will continue to lead in investing in its development, creating jobs and investing in skills.[1]

Clear guidelines that promote innovation and entrepreneurship are needed to help us all navigate the technological developments possible through AI. The precursor to our industries' success will be a positive ecosystem that focuses on early stage development across a range of sectors, rather than the lone establishment of overly-restrictive barriers.

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[1] Criteo's AI Lab in Paris is pioneering computational advertising based on transparency and user control. By promoting open research methods, the Criteo AI Lab's experts will enable the AI research community to power new AI applications.

We look forward to the AI HLEG's final publication and are ready to contribute to the ongoing discourse surrounding AI. The EUTA's members are uniquely placed to advise and showcase the real world needs and capabilities of AI in the EU tech ecosystem.

Annex: Detailed Comments

Respecting Fundamental Rights, Principles and Values - Ethical Purpose

AI, often called machine-to-machine learning, is in essence a discipline that uses digital technologies to generate systems able to autonomously reproduce human cognitive functions, especially the apprehension of data. In other words, AI is a discipline that improves human capability of learning from very large data sets and often generates tools that replace the human being when making decisions based on a vast amount of data.
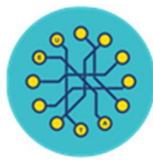
As any discipline, the potentialities of AI can be infinite, which is why any AI tool must carry society's common values or, as the AI HLEG recommends, it must be **human-centric.** The AI discipline cannot ignore that societies organise themselves through a set of institutions, operating according to the rules that reflect the common values of the community of citizens which has decided upon them.

Consequently, the "**Principle of Beneficence: Do Good**" and the "**Principle of Non-maleficence: Do no Harm**" should be inherent to AI design. We believe that the pre-conditions to implementing these two principles are:
- To raise awareness among researchers, developers, and decision makers that they are bound by the same set of values and rules as the community of citizens, therefore having to fight against **the same risks of replicating biases through AI** and be cautious that their **research results are not being misused**.
- To help identify a methodology to eliminate those risks and enable the AI research community to assess AI innovations from all possible angles (e.g. legal boundaries, economic value, social and societal implications)

As AI requires large amounts of data for learning purposes, the data should be carefully selected and be relevant to the AI's objective. This, in our view, defines the **"Principle of Justice: Be fair"**.

The other facet of an ethical AI development should be the "**Principle of Explicability: Operate Transparently**", meaning that the purposes of the use of AI tools must be clearly demonstrated, by using non-technical language.

Further comments

The vast scale of AI investment occurring outside the EU should be a wake-up call for policy makers across the European Union. We must ensure that the EU becomes a leading player in guiding EU principles based on European values, meaning:

- **Creating a level playing field between European and Non-EU AI-driven companies**

    The ability to innovate and experiment with large data sets is key to providing state-of-the art AI technologies that help solve society's most pressing problems and meet consumers' needs:

    - For authorities to identify early signs of natural changes, an AI system collects vast amounts of data on weather conditions, agricultural yields, historical land data, social media information and so on;
    - For retailers to tailor an offer of products and services convenient to new markets, an AI solution relies on multiannual shopping trends data, consumers' recommendations, sellers' inputs and so on.

    Today, a small number of dominant non-European players have the capacity to continuously improve their forward-looking AI-based services based on the collection of such data. The EU needs to take a holistic approach to ensure Europe's AI leadership is given the platform to compete on equal terms against these non-EU players.

- **Curbing EU's 'brain drain' in AI**

    Today, there are too few examples of young researchers demonstrating skills in both informatics and mathematics and emerging to meet the growing number of opportunities in the AI sector.

    In the talent race, the EU prepares the leading expertise to shape the AI ecosystem. However, in the end, non-EU players have the necessary resources to attract the most skilled individuals.

    We must ensure that more is done to identify solutions to make sure that our talents add value to the EU economy. We therefore present questions to open the discussion on curbing the EU's brain drain in AI:

    - How can we accelerate the emergence of AI training modules across the EU?
    - How do we encourage talents across the world to train and work in the EU?
    - Should the EU 'put a price' on the AI talent competition that would dissuade dominant players from absorbing the talent trained in EU schools (e.g. financing studies, establishing 'transfer fees' when hiring from the competition)?