We are only at the beginning of a rapid period of transformation of our economy and society due to the convergence of many digital technologies. Artificial Intelligence (AI) is central to this change and offers major opportunities to improve our lives. We should embrace the opportunities afforded by AI but not uncritically.
The recent developments in AI are the result of increased processing power, improvements in algorithms and the exponential growth in the volume and variety of digital data. Many applications of AI have started entering into our every-day lives, from machine translations, to image recognition, and music generation, and are increasingly deployed in industry, government, and commerce. Connected and autonomous vehicles, and AI-supported medical diagnostics are areas of application that will soon be commonplace. There is strong global competition on AI among the US, China, and Europe. The US leads for now but China is catching up fast and aims to lead by 2030.

For the EU, it is not so much a question of winning or losing a race but of finding the way of embracing the opportunities offered by AI in a way that is human-centred, ethical, secure, and true to our core values. The EU Member States and the European Commission are developing coordinated national and European strategies, recognising that only together we can succeed. We can build on our areas of strength including excellent research, leadership in some industrial sectors like automotive and robotics, a solid legal and regulatory framework, and very rich cultural diversity also at regional and sub-regional levels. It is generally recognised that AI can flourish only if supported by a robust computing infrastructure and good quality data:

- With respect to computing, we identified a window of opportunity for Europe to invest in the emerging new paradigm of computing distributed towards the edges of the network, in addition to centralised facilities. This will support also the future deployment of 5G and the Internet of Things.

- With respect to data, we argue in favour of learning from successful Internet companies, opening access to data and developing interactivity with the users rather than just broadcasting data. In this way, we can develop ecosystems of public administrations, firms, and civil society enriching the data to make it fit for AI applications responding to European needs.

We should embrace the opportunities afforded by AI but not uncritically. The black box characteristics of most leading AI techniques make them opaque even to specialists. AI systems are currently limited to narrow and well-defined tasks, and their technologies inherit imperfections from their human creators, such as the well-recognised bias effect present in data. We should challenge the shortcomings of AI and work towards strong evaluation strategies, transparent and reliable systems, and good human-AI interactions. Ethical and secure-by-design algorithms are crucial to build trust in this disruptive technology, but we also need a broader engagement of civil society on the values to be embedded in AI and the directions for future development.

This social engagement should be part of the effort to strengthen our resilience at all levels from local, to national and European, across institutions, industry and civil society. Developing local ecosystems of
skills, computing, data, and applications can foster the engagement of local communities, respond to
their needs, harness local creativity and knowledge, and build a human-centred, diverse, and socially
driven AI. We still know very little about how AI will impact the way we think, make decisions, relate to
each other, and how it will affect our jobs. This uncertainty can be a source of concern but is also a sign
of opportunity. The future is not yet written. We can shape it based on our collective vision of what
future we would like to have. But we need to act together and act fast.
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